



Low Level Waste Repository
Approval of LLWR Emergency Plan

Project Assessment Report ONR-SDFW-PAR-20-015
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EXECUTIVE SUMMARY

Approval of LLWR Emergency Plan

Permission Requested

This project assessment report relates to a request from Low Level Waste Repository Ltd (LLWR Ltd) for an approval of its amended Emergency Plan made under Licence Condition (LC) 11(1) of nuclear site licence No. 82.

Background

The Low-Level Waste Repository is the national disposal facility for low level radioactive waste, and has been operating since the 1960s. The act of disposing of radioactive waste to the vaults is regulated through the Environment Agency Permit granted under the Environmental Permitting (England and Wales) Regulations 2016. The site was relicensed from Sellafield Ltd in 2007 when LLW Repository Ltd. was set up by the NDA to run LLWR. A nuclear site licence is granted only after ONR has fully satisfied itself that the licensee has an adequate safety case and has made adequate arrangements to manage the site safely.

The implementation of these arrangements is aimed at reducing, to an acceptably low level, both the chance of an accident or emergency that might lead to the release of radioactivity and the subsequent size of any release. It is a condition of each nuclear site licence that there shall be arrangements for dealing with an accident or emergency.

The Emergency Plan is a key document in these arrangements and outlines the necessary actions that will be implemented to protect workers and the public from the effects of an accident or emergency, in the unlikely event that it should occur. Due to its importance, it is ONR policy to approve the Emergency Plan, to ensure that any subsequent changes are assessed for adequacy by ONR.

Following implementation of the Radiation (Emergency Preparedness and Public Information) Regulations 2019, the licensee has carried out a review of its Emergency Plan and identified changes it considers to be necessary. As required by LC 11(3), the licensee has written to ONR to request approval of its revised emergency arrangements that are set out in the Emergency Plan.

Assessment and inspection work carried out by ONR in consideration of this request

ONR has carried out a programme of assessment and approval of previous amendments to the licensee's Emergency Plan. The extant emergency plan was last reviewed and approved in 2018.

ONR has assessed the differences between the proposed new plan and the existing approved plan, informed by ONR guidance on Emergency Arrangements. The principal update relates to alignment of the Emergency Plan with the requirements under the Radiation (Emergency Preparedness and Public Information) Regulations 2019 (REPPiR), to identify and assess events that could lead to a Radiation Emergency on the LLWR site. ONR has previously engaged with the licensee regarding its REPPiR Hazard Evaluation and Consequences Reports. There is also the addition of a section detailing the testing of the emergency arrangements and other changes which are minor in nature.

ONR routinely observes the licensee exercise its Emergency Plan to demonstrate adequate capability to deliver the Emergency Plan and provide opportunity for the licensee to identify areas of improvement. In the period since the last review, the licensee has continued to achieve adequate performance when demonstrating its LC11 emergency arrangements.

Matters arising from ONR's work

There are no matters arising from this project assessment report.

Conclusions

ONR is satisfied that the proposed amendments to the Emergency Plan are minor in nature and that the amended plan meets ONR guidance on Emergency Arrangements. Therefore, ONR concludes that this submission satisfies the requirements of LC11(1).

Recommendation

On the basis of the documentation submitted by LLWR Ltd and ONR's assessment, it is recommended that a person with delegated authority within ONR signs and issues licence instrument number 514, a Licence Condition 11(3) Approval of the LLWR Emergency Plan, EP01 Issue 5 dated December 2020, and Licence Instrument 512 be withdrawn.

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1 PERMISSION REQUESTED

1. LLWR Ltd (the licensee) has requested, in line with its arrangements, the Office for Nuclear Regulation's (ONR's) Approval under Licence Condition 11(3) for its proposed changes to the current LLWR Emergency Plan [1]. This revision is documented as the LLWR Emergency Plan EP01 Issue 5, December 2020 [2].
2. The licensee currently has an Emergency Plan [3], which was approved by ONR in Licence Instrument 512 [4]. Licence Condition (LC) 11(3) requires the licensee to ensure that no alteration or amendment is made to an approved emergency plan unless ONR approves that alteration or amendment. This report presents the basis for ONR approval of the licensee's proposed new arrangements.
3. The proposed amendments to the plan have been subject to the licensee's due governance process and endorsed via its Management Environment, Health and Safety Committee (MEHSC) [5] and Nuclear Safety Committee [6,7].

2 BACKGROUND

4. The licensee, as required by its arrangements, has undertaken a review of its Emergency Plan to ensure alignment with the requirements under the Radiation (Emergency Preparedness and Public Information) Regulations 2019 (REPPiR), to identify and assess events that could lead to a Radiation Emergency on the LLWR site. The licensee has taken the opportunity to incorporate a number of other minor amendments during this revision.
5. As required by LC11 (3), the licensee has written to ONR to request approval of its revised emergency plan [1].

3 ASSESSMENT AND INSPECTION WORK CARRIED OUT BY ONR IN CONSIDERATION OF THIS REQUEST

6. ONR's assessment of the proposed emergency plan considered the differences between the extant emergency plan [3] and the proposed emergency plan [2]. The principle amendment relates to alignment of the revised plan to the licensee's recent REPPiR assessments regarding potential radiation emergencies upon the site.
7. The information pertaining to the initiators and assessment of the effects of a REPPiR radiation emergency on and off the LLWR site included with the Emergency Plan provides a useful summary of the dose impact to the public and personnel on the site during a radiation emergency. This summary is aligned to the information previously shared with ONR for the purposes of compliance with REPPiR [8] and provides appropriate context to the LLWR Emergency Plan. I support inclusion of this information within the Emergency Plan, which in my opinion strengthens the arrangements.
8. Additionally, a section has been added outlining the arrangements for testing of the emergency plan. The arrangements include separate levels to enable testing of the emergency plan at local and site level in addition to recognising the need to periodically deliver a demonstration exercise which will be observed and assessed by ONR. The testing arrangements include appropriate reference to recording and implementing learning from the testing programme, with production of an annual report on the status of the emergency arrangements for submission to the MEHSC. I consider the addition of this section to be a positive commitment from LLWR to on-going learning and improvement with respect to its emergency arrangements.

9. The other minor changes also included are noted below:
- Addition of Roll Call Team Leader role
 - Update 'SSCC' to 'SECC'
 - Update 'FCP' to 'Operations FCP', where relevant
 - Update 'smartboard' to 'display screen'
 - Update 'DM' to 'rota DM', where needed.
10. These minor changes provide clarity within the Emergency Plan and in my opinion improve the arrangements. I am content that LLWR continue to meet the requirements of the guidance on Emergency Arrangements [9].
11. The proposed amendments to the plan have been subject to the licensee's due governance process and were endorsed at the 360th Management Environmental, Health and Safety Committee in July 2020 [5] and subsequently the 56th meeting of the LLWR Environmental, Health and Safety Committee (NSC) on 9th October 2020 [6,7].
12. The licensee has continued to achieve an adequate performance when demonstrating the Emergency Plan aspects of the LC11 emergency arrangements, the most recent example being at Emergency Exercise "EPSILON 5", a combined safety and security incident, observed by ONR on 5 September 2019 [10].
13. ONR Civil Nuclear Security and Safeguards (CNSS) was consulted concerning the proposed approval of the revised Emergency Plan and have confirmed that they have no objections to the approval being issued [11].
14. The Environment Agency (EA) has been informed of the proposed approval of the LLWR Emergency Plan [12] and has raised no objection to ONR.
15. Licence Instrument (LI) 514 [13] has been drafted in response to the licensee's request for the approval of the LLWR Emergency Plan under Licence Condition 11(3). This LI is a routine LI for which the format and contents have been agreed with the government legal department as per ONR guidance on The Purpose and Use of Permissioning [14].

4 MATTERS ARISING FROM ONR'S WORK

16. There are no matters arising from this project assessment report.

5 CONCLUSIONS

17. I am satisfied that the revised emergency plan introduces only minor changes to the extant arrangements which ensure alignment between the licensee's Emergency Plan and its hazard and consequence assessments developed in accordance with requirements under REPPiR. I consider that these changes are adequate and acceptable.
18. The licensee has continued to successfully demonstrate the implementation of the Emergency Plan since the last review in 2018.
19. ONR therefore concludes that the proposed amendments should be implemented by granting an approval under LC 11(3).

6 RECOMMENDATIONS

20. On the basis of the documentation submitted by LLWR Ltd and ONR's assessment, it is recommended that:
- The Superintending Inspector for the DFW sub-division accepts this PAR.

- A person with delegated authority within ONR signs and issues licence Instrument number 514, a Licence Condition 11(3) Approval of the LLWR Emergency Plan EP 01 Issue 5 dated December 2020, and Licence Instrument 512 be withdrawn.

7 REFERENCES

- 1 LLWR Letter to ONR, FC-LLWR-ONR-OG-0218, 15 December 2020. 2020/321031.
- 2 LLWR Emergency Plan, EP 01 Issue 5, December 2020. 2020/321031.
- 3 LLWR Emergency Plan, EP 01 Issue 4, November 2018. 2018/373999.
- 4 Licence Instrument 512, LC11(3) Approval. 31 March 2019. 2019/76111.
- 5 LLWR Management Environment, Health and Safety Committee Meeting 360, 1 July 2020. 2020/307592.
- 6 LLWR Environment Health and Safety Committee Meeting 56 – (NSC) Quarter 3 2020, 9 October 2020. 2020/319668.
- 7 LLWR - FC-LLWR-ONR-OG-0218 - LLWR Emergency Plan - confirmation of NSC endorsement from CEO - 8 March 2021. 2021/20176.
- 8 LLWR - Updated REPPIR 2019 Hazard Evaluation and Consequences Reports – 30 April 2020 - Egress email PDF. 2021/21935
- 9 LC 11 and REPPIR – Operator’s Emergency Arrangements, NS-INSP-GD-011, Revision 7, August 2020. 2020/226579.
- 10 ONR-SDFW-IR-19-090 Revision 0, September 2019. 2019/267992.
- 11 Email from ONR Security Site Inspector regarding Emergency Plan Approval, 11 March 2021. 2021/21244.
- 12 Email to Environment Agency Site Regulator from ONR Site Inspector regarding Emergency Plan Approval, 5 March 2021. 2020/24491.
- 13 Licence Instrument 514, LC11(3) Approval. 2021/21110.
- 14 The Purpose and Use of Permissioning, NS-PER-GD-001, Revision 4, March 2020. 2020/92116.