



**Approval of revised Emergency Plan
Request for Approval of revised Emergency Plan**

Project Assessment Report ONR-SDFW-PAR-18-037
Revision 0
01 December 2018

OFFICIAL

© Office for Nuclear Regulation, [2019]

If you wish to reuse this information visit www.onr.org.uk/copyright for details.

Published 08/19

For published documents, the electronic copy on the ONR website remains the most current publicly available version and copying or printing renders this document uncontrolled.

EXECUTIVE SUMMARY

Approval of revised Emergency Plan

This project assessment report provides the basis for the recommendation supporting the issue of Licence Instrument 523 under Licence Condition (LC) 11(3) for the Approval of the revised Emergency Plan for the Dounreay Licensed Site.

Permission Requested

Dounreay Site Restoration Limited, the licensee, has requested approval of a revision to the site's emergency plan in accordance with LC 11(3).

Background

LC 11(1) requires the licensee to make and implement adequate arrangements for dealing with any accident or emergency arising on the site and their effects. The extant Dounreay Emergency Plan was 'Approved' by the Office for Nuclear Regulation (ONR) under Licence Instrument 521 which came into effect on 19 December 2015. LC 11(3) requires the licensee to ensure that once approved no alteration or amendment is made to the approved arrangements unless ONR has approved such alteration or amendment.

The Radiation (Emergency Preparedness and Public Information) Regulations 2001 (REPPiR) require the licensee to review its emergency plan at least triennially. The licensee has completed its most recent review and has proposed to revise its Emergency Plan to incorporate a number of minor changes: This has been submitted to ONR for Approval under covering letter D/ONR/931N.

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

The proposed amendment to the Dounreay Emergency Plan has been assessed by ONR and is considered to adequately address the expectations set out in ONR's guidance document NS-INSP-GD-011 (Revision 5). The main changes focus on:

- Reflecting consistency with the Dounreay Site Restoration Limited (DSRL) Off-Site Emergency Plan;
- Reflecting the changes to the Vulcan Naval Reactor Test Establishment (NRTE) Declaration Status;
- Removal of the requirement for Stable Iodine Tablets;
- Incorporating minor additions following the review of the Nuclear Emergency Arrangements Forum (NEAF) Good Practice guidelines.

The ONR Site Security Inspector, ONR's Emergency Preparedness and Response (EP&R) technical specialism and the Scottish Environmental Protection Agency (SEPA) Site Inspector were consulted as part of this assessment.

Matters arising from ONR's work

There are no regulatory issues or concerns arising from ONR's assessment of the revised Emergency Plan.

Conclusions

The proposed amendments to the Emergency Plan have undergone a formal review within the licensee's organisation and have been subject to ONR assessment. I am satisfied that the revised Dounreay Emergency Plan adequately addresses the expectations set out within

ONR's guidance and consider that there is no technical or regulatory reason to withhold Approval of the amended Emergency Plan.

Recommendation

This project assessment report recommends that Licence Instrument 523 be issued under Licence Condition 11(3) of Schedule 2 to Nuclear Site Licence No. Sc.17 for the approval of the Dounreay Emergency Plan, Issue 11.

LIST OF ABBREVIATIONS

CNS	Civil Nuclear Security
DSRL	Dounreay Site Restoration Limited
DNSEC	Dounreay Nuclear Safety and Environment Committee
EP&R	Emergency Preparedness and Response
LC	Licence Condition
NEAF	Nuclear Emergency Arrangements Forum
NRTE	Naval Reactor Test Establishment
ONR	Office for Nuclear Regulation
REPPIR	Radiation (Emergency Preparedness and Public Information) Regulations 2001
SEPA	Scottish Environmental Protection Agency

TABLE OF CONTENTS

1	PERMISSION REQUESTED	7
2	BACKGROUND	7
3	ASSESSMENT AND INSPECTION WORK CARRIED OUT BY ONR IN CONSIDERATION OF THIS REQUEST	7
4	MATTERS ARISING FROM ONR'S WORK.....	7
5	CONCLUSIONS	8
6	RECOMMENDATIONS.....	9
7	REFERENCES	10

1 PERMISSION REQUESTED

1. The Licensee has requested ONR's Approval under Licence Condition (LC) 11(3) of Issue 11 of the Dounreay Emergency Plan.

2 BACKGROUND

2. LC11(1) requires the licensee to make and implement adequate arrangements for dealing with any accident or emergency arising on the site and their effects. The extant Dounreay Emergency Plan [Ref.1] was Approved by ONR under Licence Instrument 521 which came into effect on 19 December 2015.
3. LC11(3) requires the licensee to ensure that once approved no alteration or amendment is made to the approved arrangements unless ONR has approved such alteration or amendment.
4. The Radiation (Emergency Preparedness and Public Information) Regulations 2001 (REPPiR) require the licensee to review its emergency plan once every three years, if not before. The licensee has undertaken a review of their emergency arrangements and has proposed an up-issue of their emergency plan. The licensee has written to ONR [Ref.2] requesting Approval of the proposed up-issue of the Dounreay Emergency Plan [Ref.3].

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

5. ONR has carried out a programme of work commensurate with the scope of changes requested. An assessment has been undertaken against the changes presented within the revised plan against the expectations enshrined in ONR's guidance document NS-INSP-GD-011 [Ref.4] and takes into account the assessment conducted against the site's Level 1 Demonstration Exercise [REDACTED] conducted on 19 Sep 18 [Ref.5] and compliance inspections [Ref.6] conducted on 13 and 15 Nov 18 against the requirements of LC12 and LC28 in support of their emergency arrangements. I have also taken into account the independent challenge and oversight provided via the licensee's own governance arrangements, specifically the minutes of the Dounreay Nuclear Safety and Environment Committee (DNSEC) held on 29 Aug 18 [Ref.7].
6. The ONR Site Security Inspector, the ONR Emergency Preparedness and Response specialism and SEPA have been consulted as part of this assessment.

4 MATTERS ARISING FROM ONR'S WORK

7. For this assessment effort has been concentrated on the proposed changes presented within the revised Dounreay Emergency Plan.
8. The changes proposed are as a result of the formal review DSRL undertakes against their emergency arrangements every three years. The key changes proposed within the up-issue to the Dounreay Emergency Plan are:
 - Improved consistency with the DSRL Off-Site Emergency Plan: Specifically, to provide improved clarity regarding the roles of Scottish Government as the Lead Government Department; the role of Public Health England Radiation, Chemical and Environmental Hazards (PHE(CRCE)) for the coordination and analysis of the long term monitoring of the wider area beyond the emergency planning zone; the role of Scottish Water regarding the identification, sampling and analysis of potentially contaminated water supplies.

- Reflecting the changes to the Vulcan NRTE Declaration Status: Specifically the change from a 'Reactor Safety Alert' declaration to 'Safety Alert' declaration to cover an abnormal event posing a potential threat to reactor plant safety;
 - Removal of the requirement for Stable Iodine Tablets following the shutdown of the reactor at Vulcan in 2015;
 - Incorporating minor additions following the review of the NEAF Good Practice guidelines. Specifically, the plan now provides an overview of the nature of the operations conducted on the licensed site and provides a summary of the main cross-site and off-site hazards to workers and the public identified from the safety assessments. In addition the plan now reinforces the role of the site emergency controller with regards the welfare and safeguarding of site personnel, including those within the emergency centres. The plan also includes a more detailed overview of the training and qualification process for personnel identified to undertake emergency response roles.
9. In addition, the challenge provided through the licensee's own management arrangements have resulted in improved clarity of the role and responsibilities of the site emergency controller. Specifically:
- Determining primacy for the event and the continual re-evaluation of that status as the event progresses; and
 - Consideration of coping with extended timescales, particularly when a crime scene is declared by Police Scotland.
10. Overall, I consider that the changes presented within the revised emergency plan to be minor in nature. The changes presented provide additional clarity on key roles and responsibilities within the emergency response organisation and capture a number of external changes that are outside the control of the licensee.
11. In addition, the conclusions from the formal assessment of the Level 1 safety demonstration exercise and the compliance inspections against LC 12 and 28 did not identify any concerns regarding the adequacy of DSRL's emergency arrangements. As such there is no evidence to suggest that a more significant change is required. I consider that a revised issue that reflects minor changes at this point in time to be appropriate.
12. The ONR Site Security Inspector has confirmed that he has no objection to the Approval of the revised Dounreay Emergency Plan [Ref.8].
13. The ONR Emergency Preparedness and Response specialism has confirmed that the revised plan meets their expectations and that they have no objection to the Approval of the Dounreay Emergency Plan [Ref.9].
14. SEPA has reviewed the Dounreay Emergency Plan and confirmed that the plan reflects its responsibilities and that it has no objection to the issue of the Approval [Ref.10].

5 CONCLUSIONS

15. This report presents the findings of the ONR assessment of the proposed changes to DSRL's emergency arrangements as presented within the revised Dounreay Emergency Plan (Issue 11).
16. To conclude, I am satisfied that the revised Dounreay Emergency Plan adequately addresses the expectations set out within ONR's guidance and consider that there is no technical or regulatory reason to withhold Approval of the amended Emergency Plan.

6 RECOMMENDATIONS

17. The project assessment report recommends that Licence Instrument 523 be granted under LC 11(3) of Schedule 2 to Nuclear Site Licence No. Sc.17 for the Approval of the Dounreay Emergency Plan, Issue 11.

7 REFERENCES

1. Dounreay Emergency Plan, Issue 10, DNSEC(15)P11, August 2015. [2015/319551]
2. Letter D/ONR/931N, DSRL Emergency Arrangements, dated 3 September 2018. [2018/288401]
3. Dounreay Emergency Plan, Issue 11, DNSEC(18)P18, August 2018. [2018/288401]
4. Emergency Arrangements, NS-INSP-GD-011 Revision 5, ONR, July 2017. http://www.onr.org.uk/operational/tech_insp_guides/index.htm
5. Intervention Record: Dounreay – Level 1 Demonstration Exercise, IRR17 and LC Compliance Inspections [LC7, LC8 and LC9], ONR-SDFW-IR-18-099. [2018/307763]
6. Intervention Record: Dounreay – LC Compliance Inspections [LC12, LC26 and LC28], ONR-SDFW-IR-18-139. [2018/376524]
7. Dounreay Nuclear safety and Environment Committee – Minutes of the meeting held 29 August 2018, Issue 1, DNSEC(18)M003. [2018/379479]
8. Email: ██████████ (ONR-CNS)/██████████ (ONR) dated 23 October 2018, [2018/381338]
9. Email: ██████████ (ONR-EP&R)/██████████ (ONR) dated 7 November 2018. [2018/381378]
10. Email: ██████████ (SEPA)/██████████ (ONR) dated 2 November 2018. [2018/381352]