



Chapelcross emergency arrangements

Licence condition 11(3) – Emergency arrangements, Request for approval of amendment of Chapelcross accident and emergency arrangements

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

Title

Approval under Licence Condition (LC) 11(3) to implement revised accident and emergency arrangements at Chapelcross.

Permission Requested

Magnox Limited's (ML) Chapelcross (CHX)_licenced nuclear site has requested the Office for Nuclear Regulation's (ONR) approval to amend its accident and emergency arrangements that will result in those arrangements being consistent with other ML decommissioning sites having contingency arrangements. This request is made in accordance with LC 11(3) in schedule 2 of nuclear site licence Sc 15.

Background

In June 2020, ONR determined that CHX was one of the licensed nuclear sites not requiring an Outline Planning Zone (OPZ) under the Radiation (Emergency Preparedness and Public Information) Regulations 2019 (REPPiR 19).

ML has proposed a key change to CHX's emergency arrangements under LC11(3), Operational Shift Transition (OST), that has led to the current request. This proposes changes to the Accident and Emergency Arrangements to support the introduction of monitoring and surveillance by the Site Security Guard Force during silent hours, and withdrawal of operations shift patterns. CHX's proposal does not fundamentally change the Accident and Emergency Arrangements, nor the roles defined to enact them; it simply changes the way the roles are fulfilled during silent hours. The withdrawal of the operations shift patterns means that the Duty Controller will not be on site during silent hours but is contactable.

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

I reviewed the Licensee's emergency arrangements focussing upon the differences between the extant and the proposed arrangements and the associated governance performed by the Magnox Nuclear Safety Committee (NSC). My assessment is based upon documentation provided by the licensee and engagement with CHX and Magnox Corporate Centre. I have considered the revised CHX contingency arrangements against regulatory expectations in line with ONR's due process.

I confirmed that CHX had followed ML's corporate arrangements, have extensively engaged with CHX during the development of the OST proposal and ensured that I was regularly updated on its progress towards OST over the last 12 months.

I observed a successful demonstration of the extant contingency arrangements and have sampled the ML Site Inspector's report for the May 21 demonstration of the revised CHX emergency arrangements for OST.

As part of Chapelcross' intended move to OST, ONR CNSS has engaged with CHX in order that a Security Risk Assessment (SRA) be provided. CHX produced the SRA which has now been issued.

Matters arising from ONR's work

There are no unresolved matters from the ONR's assessment and inspection work.

Conclusions

I am satisfied that the licensee's proposed amendment of the CHX emergency arrangements is adequate and satisfies the requirements of licence condition 11.

Recommendation

I recommend that in accordance with LC 11(3), ONR approves the proposed amendment to CHX's emergency arrangements.

LIST OF ABBREVIATIONS

ALARP	As low as reasonably practicable
CHX	Chapelcross (licenced nuclear site, licence number SC.15)
CNSS	Civil Nuclear Security (ONR)
EP&R	Emergency Preparedness and Response
HOW2	(Office for Nuclear Regulation) Business Management System
LC	Licence Condition
ML	Magnox Limited
NDA	Nuclear Decommissioning Authority
ONR	Office for Nuclear Regulation
OST	Operational Shift Transition
REPPIR	Radiation (Emergency Preparedness and Public Information) Regulations
RFSC	Re-baselined Facilities Safety Case
RGP	Relevant Good Practice
SAP	Safety Assessment Principle(s)
SFAIRP	So far as is reasonably practicable

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.....	8
5	CONCLUSIONS	8
6	RECOMMENDATIONS.....	8
7	REFERENCES	10

1 PERMISSION REQUESTED

1. Magnox Limited's (ML) Chapelcross (CHX) licensed nuclear site has requested (Ref 1) the Office for Nuclear Regulation's (ONR) approval to permit implementation of amended accident and emergency arrangements that will result in CHX's arrangements being consistent with other ML decommissioning reactor sites with contingency arrangements. This request is made in accordance with licence condition (LC) 11(3) in schedule 2 of nuclear site licence Sc 15.
2. LC 11(3) requires the Licensee (ML) to ensure that no alteration or amendment is made to the previously approved arrangements unless the Office for Nuclear Regulation (ONR) has approved such alteration or amendment. The change to the arrangements requires the withdrawal of the existing Approval in Licence Instrument (LI) 540 (Ref 2) which was made under LC 11(3).
3. The proposed changes have been considered by the Magnox Nuclear Safety Committee (NSC) (Ref 1). A copy of the minutes of the NSC at which Issue 3 of the revised arrangements were accepted has been issued to ONR (Ref 1).

2 BACKGROUND

4. In September 2016 ONR issued LI540 to CHX (Ref 2) that approved the replacement of the preceding off-site emergency arrangements with revised on-site Contingency Arrangements.
5. Subsequently, ONR determined that CHX was one of the licensed nuclear sites not requiring an Outline Planning Zone (OPZ) under the Radiation (Emergency Preparedness and Public Information) Regulations 2019 (REPPiR 19) so there was no change to the Contingency Arrangements.
6. Since the issue of LI540, ML has proposed a key change, Operational Shift Transition (OST), to CHX's emergency arrangements that has led to the current request (Ref 1). CHX is proposing a change in summer 2021 that concerns the withdrawal of 24 hour / 7-day Duty Controller cover at the site.
7. ML's NSC paper (Ref 1) presents proposed changes to the Accident and Emergency Arrangements to support the introduction of monitoring and surveillance by the Site Security Guard Force during silent hours, and withdrawal of operations shift patterns. The proposal does not fundamentally change the Accident and Emergency Arrangements, nor the roles defined to enact them; it simply changes the way the roles are fulfilled during silent hours. The withdrawal of the operations shift patterns means that the Duty Controller will not be on site during silent hours but is contactable.

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

8. I reviewed the Licensee's emergency arrangements focussing upon the differences between the extant and the proposed arrangements and the associated governance performed by the Magnox NSC. My assessment is based upon documentation provided by the licensee and engagement with CHX and Magnox Corporate Centre.
9. I have considered the revised CHX contingency arrangements against regulatory expectations in line with ONR's due process (Ref 3), ONR's LC 11 inspection guide (Ref 4) and the Site Licence Conditions (Ref 5).
10. CHX's request to ONR highlighted that they wished to remove the Duty Controller from shift staffing during silent hours but retain them on-call. The role of the Security Lead Guard during an accident or emergency is to investigate the alarm, provide information to the Duty Controller who is on call and to support the Duty Controller's response as

directed. Responsibility for site operations and site safety will not be transferred to the Security Guards and will remain with Duty Controller at all times. Implementation of the licensee's proposal will result in an organisational change that will not see a reduction in staff numbers but changes to roles.

11. I confirmed that CHX had followed ML's corporate arrangements 'Emergency Planning and Response (EP&R)' PD-014, 'Contingency & Emergency Arrangements' S-074, and 'Generic Accident and Emergency Arrangements. Sites in Monitoring and Surveillance in Silent Hours', F-024 (S-901 Part 4) for the transition to OST (Refs 6, 7, 8).
12. I have extensively engaged with CHX during the development of the OST proposal and ensured that I was regularly updated on its progress towards OST over the last 12 months (Ref 9).
13. I observed a successful demonstration of the extant contingency arrangements in June 2019 (Ref 10) and have sampled the ML Site Inspector's report for the May 21 demonstration of the revised CHX emergency arrangements for OST (Ref 11). The ONR CNSS Site Inspector has also consulted with the ML Site Inspector regarding the OST Exercise which took place on 20 May 2021 and has also received the post exercise report to assist in his determination of security Approval for the move to OST. From previous co-operation, I have confidence in supporting the ML Site Inspector's judgement that CHX had carried out a successful demonstration of its proposed OST contingency arrangements.
14. As part of Chapelcross' intended move to OST, ONR CNSS have engaged with the CHX Site Security Manager (SSM), in order that a Security Risk Assessment (SRA) be provided. CHX produced the SRA which has now been issued (Ref 12).

4 MATTERS ARISING FROM ONR'S WORK

15. There are no unresolved issues arising from ONR's assessment.

5 CONCLUSIONS

16. This report presents ONR's consideration of CHX's request to amend its contingency arrangements under LC11 (3). I am satisfied that the change to Chapelcross Site Accident and Emergency Arrangements. Sites in Monitoring and Surveillance in Silent Hours; CX/AEA; Issue 3; September 2020 has been adequately justified by the Licensee.
17. In my opinion the licensee's proposed alteration or amendment of the CHX contingency arrangements is adequate to satisfy the requirements of Licence Condition 11. In reaching this judgement I have taken into account the following:
 - My assessment of CHX's proposed amendments to its contingency arrangements and confirmation that CHX has followed the ML corporate arrangements.
 - My interventions with CHX site staff on the proposed new contingency emergency arrangements, and the adequate demonstration of those arrangements.
 - CHX's proposal having followed ML's governance process and its endorsement by ML's Nuclear Safety Committee.
18. I conclude that ONR should approve the revised accident and emergency arrangements for Chapelcross.

6 RECOMMENDATIONS

19. That Licence Instrument LI 543 (Ref 13) be issued for site licence number Sc 15 under LC 11(3) to Approve Chapelcross Site Accident and Emergency Arrangements. Sites in Monitoring and Surveillance in Silent Hours; CX/AEA; Issue 3; September 2020.
20. That Licence Instrument LI 540 (Ref 2) that Approved Chapelcross Site Accident and Emergency Arrangements; CX/AEA; Issue 2; April 2016 be withdrawn for site licence number Sc 15 under LC1(3)(a).
21. I recommend that a person with delegated authority in ONR:
 - Accepts the conclusions and recommendations in this report that justify issuing Approval of Licence Instrument No. 543.
 - Signs Licence Instrument No. 543 giving effect to ONR's Approval of CHX's proposed amendment of its emergency arrangements under LC 11(3).

7 REFERENCES

1. Letter from Chapelcross – Request for Approval of Amendment to the Chapelcross Accident and Emergency Arrangements; CX50733R; 1st April 2021 – with attachment: Nuclear Safety Committee; Chapelcross Site; Proposed changes to the Chapelcross Site Accident and Emergency Arrangements Following Implementation of the Operations Shift Transition Project; NP/SC 5408; Revision 1; 5th October 2020 – and attachment: Chapelcross Site Accident and Emergency Arrangements; CX/AEA; Issue 3; 30th September 2020– and attachment: Minutes of the Joint Meeting of the Magnox Limited Berkeley, Bradwell, Chapelcross, Dungeness A, Harwell, Hinkley Point A, Hunterston A, Oldbury, Sizewell A, Trawsfynydd, Winfrith and Wylfa Nuclear Safety Committees held on Wednesday 9th September 2020; 22nd September 2020 (2021/45331)
2. Chapelcross - Licence Instrument - LI 540 - Signed - Approval regarding change of emergency arrangements and move to contingency arrangements - 19 September 2016 (2016/370510)
3. Purpose and Scope of Permissioning; NS-PER-GD-001 Revision 4; March 2020. (2020/92116)
4. Emergency Arrangements; NS-INSP-GD-011; Revision 7; August 2020. (2020/226579)
5. Office for Nuclear Regulation: Licence Condition Handbook; February 2017. <http://www.onr.org.uk/documents/licence-condition-handbook.pdf>
6. Magnox Process Document 'Emergency Planning and Response (EP&R)' PD-014; Issue 3; 22.01.2019.(2021/27184)
7. Magnox Standard Procedure 'Contingency & Emergency Arrangements' S-074; Issue 2; 14.05.2019.(2021/27185)
8. Magnox Form 'Generic Accident and Emergency Arrangements. Sites in Monitoring and Surveillance in Silent Hours' F-024 (S-901 Part 4); Issue 6; July 2020. (2021/27187)
9. Regulatory functions - Inspection - ONR (Office for Nuclear Regulation) - SDFW (Sellafield Decommissioning Fuel & Waste) - Scottish sites covering - Chapelcross & Hunterston A - intervention records & contact records - 2017 – 2020. (4.5.9348.)
10. ONR-SDFW-IR-19-045 - Hunterston A & Chapelcross: SAW Bunker 1 Retrievals SBI (continued); MAC & Cobalt Retrievals SBI; Contingency exercise; Site Meetings – 24-28 June 2019 - B Kings. (2020/29402)
11. Magnox - Chapelcross - IntOv-2021-045 Assessment Report for Chapelcross Exercise Bluebell - May 2021 (2021/45332)
12. Magnox – Chapelcross Operational Shift Transition -CNSS – DR – 21- 179 - June 2021. (2021/43678)
13. Chapelcross - Licence Instrument - LI 543 - Approval regarding change to contingency arrangements; 9 June 2021 (2021/45558)