



Approval of an Amendment to the Nuclear Maintenance Schedule Preface that is used at the Berkeley, Bradwell, Chapelcross, Dungeness A, Hinkley Point A, Hunterston A, Oldbury, Sizewell A and Trawsfynydd sites.

Approval of an amended Maintenance Schedule Preface, described in NP/SC 5351 Revision 2, and used at 9 magnox reactor sites.

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EXECUTIVE SUMMARY

Approval of an Amendment to the Nuclear Maintenance Schedule Preface that is used at the Berkeley, Bradwell, Chapelcross, Dungeness A, Hinkley Point A, Hunterston A, Oldbury, Sizewell A and Trawsfynydd sites.

This report assesses the proposal by Magnox Ltd to adopt a new, generic Nuclear Maintenance Schedule (NMS) Preface (presented in Appendix C of NP/SC 5351 Rev 2) at 9 of its sites (Berkeley, Bradwell, Chapelcross, Dungeness A, Hinkley Point A, Hunterston A, Oldbury, Sizewell A and Trawsfynydd) and recommends that Licence Instruments are issued at all 9 sites to approve the preface under Licence Condition (LC) 28(5).

Permission Requested

Magnox Ltd has requested approval under LC 28(5) of a new, generic NMS Preface at 9 of its former power reactor sites.

Background

Magnox Ltd has reviewed the NMS prefaces that are approved at each of its sites and concluded that they are in need of rationalisation such that they should not require further amendment before the sites reach final site clearance. NP/SC 5351 Rev 2 justifies the wording of a proposed generic NMS Preface that could be adopted at 9 former Magnox power reactor sites that are now decommissioning; the sites are Berkeley, Bradwell, Chapelcross, Dungeness A, Hinkley Point A, Hunterston A, Oldbury, Sizewell A and Trawsfynydd. As each site is licensed individually, the Office for Nuclear Regulation (ONR) has been asked to provide 9 approvals.

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

There was one paper that proposed one generic NMS Preface, it was accepted by the company independent nuclear safety assessor and the members of the nuclear safety committee and therefore the proposal has been assessed as a single project by ONR. The proposal involves the adoption of a basic NMS Preface and therefore most of the assessment has concentrated on reading the justification for the wording in the preface, and ensuring that the correct licence condition, licence instrument and associated references have been quoted in the request for approval. No site inspection work has been necessary.

Matters arising from ONR's work

No issues have arisen with the assessment of the wording of the generic NMS Preface presented in Appendix C of NP/SC 5351 Rev 2 and proposed for use at all 9 of the sites considered here. The Magnox Ltd letter that requested the 9 approvals was basically correct, however, there was an error regarding details of the extant Dungeness A LC 28 approval. Also, complex referencing used at Hunterston A required further explanation before it was clear that the correct LI was quoted. Following discussion with Magnox Ltd personnel all concerns have been addressed and draft LIs for NMS Preface approvals under LC 28(5) were produced for the 9 sites.

Conclusions

This was a straightforward proposal that raised no technical issues or concerns. ONR supports the fact that Magnox Ltd is trying to simplify an approved document in such a way that neither they nor the regulator will need to spend time on this again for the remaining time that the sites have nuclear site licences.

Recommendation

This report recommends that the findings of this project assessment report are supported and that the 9 draft LIs that have been prepared for approval of NMS Prefaces under LC 28(5) are signed by an ONR inspector that has the delegated authority to do so.

LIST OF ABBREVIATIONS

HOW2	(Office for Nuclear Regulation) Business Management System
HSE	The Health and Safety Executive
INSA	Independent Nuclear Safety Assessment
LC	Licence Condition
ONR	Office for Nuclear Regulation
NMS	Nuclear Maintenance Schedule
NSC	Nuclear Safety Committee
NSL	Nuclear Site Licence

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1 PERMISSION REQUESTED

1. The Nuclear Maintenance Schedule Preface is approved by the Office for Nuclear Regulation (ONR) under Licence Condition (LC) 28(4) and once approved it cannot be altered or amended without ONR approval under LC28(5). Magnox Ltd has written to ONR (Ref 1) to request that a generic maintenance schedule preface (Ref 2), that has been accepted for use by both the independent nuclear safety assessment assessor (Ref 3) and the nuclear safety committee (Refs 4 and 5), is approved by ONR for use at 9 of its former Magnox power station sites. The request is considered in this project report.

2 BACKGROUND

2. Licence Condition 28, that is attached to a nuclear site licence, requires that a licensee shall make and implement adequate arrangements for the regular and systematic examination, inspection, maintenance and testing of all plant which may affect safety (LC28(1)). The arrangements shall provide for the preparation of a plant maintenance schedule for each plant (LC28(4)). The licensee shall submit to ONR for approval such part or parts of the arrangements and plant maintenance schedule as ONR may specify (LC28(2) and LC 28(4) respectively). If approved, the licensee cannot change arrangements or plant maintenance schedule without further ONR approval (LC28(3) and LC28(5) respectively).
3. In line with ONR practice (Ref 6), ONR has only approved the plant maintenance schedule preface (initially under LC28(4) and following alteration/amendment, under LC28(5)) at Magnox Ltd licensed sites. In the past ONR has also issued agreements to arrangements for extension of interval specified in the plant maintenance schedule under LC28(7).
4. Due to the considerable change that have been taking place within the nuclear industry over recent decades, changes within both Magnox Ltd and the regulators over recent years, many of the former Magnox power station ONR approved nuclear maintenance schedule (NMS) prefaces have become erroneous as they reference obsolete documents, do not always reference the current permissioning regulator and do not necessarily reflect current site post titles. Following a thorough review, Magnox Ltd has produced a generic NMS preface that it wishes to have approved for use at 9 of its sites; the sites being Berkeley, Bradwell, Chapelcross, Dungeness A, Hinkley Point A, Hunterston A, Oldbury, Sizewell A and Trawsfynydd.
5. All of the 9 sites are defuelled and decommissioning, that is, radiological hazard has been reduced significantly and they are moving towards care and maintenance. All of the sites have considerably less plant that may affect safety than was the case when they were generating power stations. The generic NMS preface is appropriate for the current lifecycle stage as it is adequate and there should be little need to change it between now and final site clearance. The changes from the currently approved prefaces are relatively minor in nature; effectively the preface is being tidied-up so that it should remain relevant for the remainder of licensed activities at each of these 9 sites.
6. The requesting letter (Ref 1) covers all 9 sites; it correctly states the site name and nuclear site licence number for each site and then gives details of how the proposed approved preface will be identified and exactly what approved arrangement (reference number if applicable and Licence Instrument number issued under what Nuclear Site Licence number) will be replaced (and withdrawn).

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

7. As ONR's Magnox Limited Corporate Inspector I have considered this proposal as a single project even though it results in LC 28 approvals being required at 9 Magnox sites. The safety case/technical justification for the change is presented in Reference 2. This paper correctly states that the NMS Preface forms part of the compliance arrangements for Nuclear Site Licence Condition 28 and that it may not be changed without the approval of ONR. The currently approved NMS Prefaces are all based on the same model with variations of an editorial nature or as associated with document presentation. The extant model preface and current site-specific versions refer to other company processes and procedures in order to point the reader to more detailed arrangements. The recent introduction of the Common Process Project has resulted in some of the referenced material becoming superseded. Furthermore changes in relevant legislation has led to ONR becoming the principal regulator not HSE. Consequently, the proposed revision of the preface can address the extant obsolete reference and ensure that ONR is correctly named.
8. Reference 2 explains that Magnox Ltd carried out a review to consider the implications of the named sites adopting the proposed NMS preface. A key finding of the review was that the existing compliance arrangements are not impacted by the proposed changes. The independent nuclear safety assessment (INSA) of Reference 2 (Ref 3) gives agreement to the proposed NMS Preface (as presented in Appendix C of Ref 2) without any caveat or INSA condition.
9. An early version of Reference 2 was considered at a meeting of the Nuclear Safety Committee (NSC) on 14 December 2017 (Ref 4) and the final version of Reference 2 (Revision 2) was considered again at the NSC on 2 May 2018 (Ref 5). NSC members were briefed that the NMS is divided into the Preface, the Rationale and the Schedule and that ONR only approved the Preface. They were also informed that the proposal was to remove all explicit references to company or site-specific documents to accommodate the anticipated changes to the Quality Management System. At the first NSC meeting (Ref 4) the proposal was endorsed subject to a minor revision. When the final version of Reference 2 was considered at the second NSC meeting (Ref 5) the paper had been amended slightly to take on board initial NSC comments, INSA comments and some ONR feedback (on extension of interval arrangements). The NSC endorsed the paper without further comment.
10. I am satisfied that the proposal has passed through due process (review by the licensee's suitably qualified and experienced people, independent nuclear safety assessment and consideration by an NSC that contains both company and independent nuclear safety experts) without any outstanding issues being identified. All support adoption of the proposal.
11. I have checked that all of the 9 site names and their nuclear site licence numbers are correct and that the currently approved NMS Prefaces quoted in the requesting letter (Ref 1) are correctly identified. I have also checked that the proposed prefaces have unique references that will allow identification should they need to be amended/changed in the future.

4 MATTERS ARISING FROM ONR'S WORK

12. ONR was given sight of the original version of the proposal as it was about to be considered by the NSC. This led to me questioning why LC28(7) 'extension of interval' was not addressed (and therefore there would be an ongoing need for LC28(7) agreements as at present – See Ref 16). Magnox Ltd decided to amend the generic NMS preface once again to cover extension to interval thus resulting in the paper being released at Revision 2 (Ref 2) and the proposed NMS Preface (at Appendix C of

Ref 2) now contains paragraph 6.2 that addresses extensions of any intervals specified in the NMS. This amendment was considered and supported by INSA (Ref 3) and the NSC (Ref 5). References 7 to 15 confirm that Magnox Ltd intends to use the exact wording given in Reference 2 Appendix C for the NMS Preface at all 9 of their sites covered by this proposal.

13. Magnox Ltd wrote and sought ONR approval of 9 NMS Prefaces (Ref 1). The letter lists unique identification references for both proposed and extant MS Prefaces at the 9 sites. I trawled the ONR records system for copies of the extant LC28(4/5) approvals for the 9 sites (See Ref 17) so as to confirm the details. I checked these and I am satisfied that the information in Reference 1 is correct for 7 sites (Berkeley, Bradwell, Chapelcross, Hinkley Point A, Oldbury, Sizewell A and Trawsfynydd), however, I identified potential errors regarding the Dungeness A and Hunterston A information.
14. I raised my concerns with the Magnox Ltd project leader in a telephone discussion. It was quickly established that the wrong Licence Instrument (LI) had been quoted for Dungeness. The current Dungeness A NMS Preface has been approved by HSE in LI 510 that was granted under Nuclear Site Licence (NSL) 88; the LI quoted in Reference 1, LI 501 issued under NSL 94, gave regulator agreement to an extension of interval under LC28(7). Otherwise, all other information relating to Dungeness A contained within Reference 1 is correct. I decided that Magnox Ltd did not need to re-issue Reference 1 as I was fully aware of the correct LI and NSL numbers associated with Dungeness A and there was nothing else wrong in the letter.
15. The Hunterston A discrepancy was initially a little more difficult to understand. Eventually the Magnox Ltd project leader provided an explanation regarding reference numbers associated with the site's NMS preface in an email (Ref 18). The reasoning appears to confirm that the referencing quoted in Reference 1 is adequate and therefore I have accepted the explanation.
16. I have produced draft approvals for the 9 sites (Ref 19). LI wording was taken from Reference 1 following checks on relevant extant LIs (Ref 18). As well as recording what is being substituted for what, each approval also records the withdrawal of any related LI that will be superseded if the proposed approval is formally issued.

5 CONCLUSIONS

17. This report presents the findings of my assessment of the Magnox Ltd proposal to introduce a generic NMS Preface at its Berkeley, Bradwell, Chapelcross, Dungeness A, Hinkley Point A, Hunterston A, Oldbury, Sizewell A and Trawsfynydd sites.
18. To conclude, I am broadly satisfied with the claims, arguments and evidence laid down within the safety case and therefore I propose that ONR should approve the NMS Preface under LC28(5) at these 9 sites.

6 RECOMMENDATIONS

19. I recommend that the findings of this project assessment report are supported and that the 9 draft LIs that have been prepared are signed by an ONR inspector that has the delegated authority to do so.

7 REFERENCES

1. Magnox Ltd letter to ONR; Unique Ref: MXL32416R; Dated 14 June 2018
Nuclear Installations Act 1965 (as amended); Magnox Limited; Berkeley (NSL No. 92), Bradwell Site (NSL No. 93), Chapelcross Site (NSL No. Sc. 15), Dungeness A Site (NSL No.94), Hinkley Point A Site (NSL No. 95A), Hunterston A Site (NSL No. Sc. 16), Oldbury (NSL No. 57A), Sizewell A Site (NSL No. 96), Trawsfynydd Power Station (NSL No. 81); Request for Approval of the Amended Nuclear Maintenance Schedule Prefaces under Sites' Licence Condition 28(5).

NOTE: This letter had 5 attachments:-

1. NP/SC5351Rev2 (see Ref 2 below)
2. INSA5B for NP/SC5351Rev2 (see Ref 3 below)
3. Minutes for 7 December 2017 NSC meeting (see Ref 4 below)
4. Minutes for 24 April 2018 NSC Meeting (see Ref 5 below)
5. Proposed and Extant Prefaces for each of 9 sites (see Refs 7 to 15 below)

TRIM 2018/330109

2. NP/SC 5351 Revision 2; Berkeley, Bradwell, Chapelcross, Dungeness A, Hinkley Point A, Hunterston A, Oldbury, Sizewell A & Trawsfynydd Sites; Amendment of the Nuclear Maintenance Schedule Preface; 24 April 2018; **TRIM 2018/330126**
3. Final INSA Statement for NP/SC 5351 Rev 2; 3 April 2018; **TRIM 2018/330131**
4. NSC Minutes for meeting held on 7 December 2017; Para 147 to 160; **TRIM 2018/563**
5. NSC Minutes for meeting held on 24 April 2018; Para 122 to 129; **TRIM 2018/173855**
6. ONR HOW2 Guide for LC28 Examination, Inspection, Maintenance and Testing (EIMT) – NS-INSP-GD-028 Revision 5 – July 2016.
7. Berkeley - Proposed and Extant MS Prefaces; **TRIM 2018/330151**
8. Bradwell - Proposed and Extant MS Prefaces; **TRIM 2018/330153**
9. Chapelcross - Proposed and Extant MS Prefaces; **TRIM 2018/330159**
10. Dungeness A - Proposed and Extant MS Prefaces; **TRIM 2018/330164**
11. Hinkley Point A - Proposed and Extant MS Prefaces; **TRIM 2018/330168**
12. Hunterston A - Proposed and Extant MS Prefaces; **TRIM 2018/330176**
13. Oldbury - Proposed and Extant MS Prefaces; **TRIM 2018/330182**
14. Sizewell A - Proposed and Extant MS Prefaces; **TRIM 2018/330187**
15. Trawsfynydd - Proposed and Extant MS Prefaces; **TRIM 2018/330195**
16. Extant LC28(7) agreements for the Berkeley, Bradwell, Chapelcross, Dungeness A, Hinkley Point A, Hunterston A, Oldbury, Sizewell A & Trawsfynydd Sites; **TRIM 2018/330920**
17. Copies of 9 Extant Approvals issued under LC28 for the Berkeley, Bradwell, Chapelcross, Dungeness A, Hinkley Point A, Hunterston A, Oldbury, Sizewell A & Trawsfynydd Sites; **TRIM 2018/331077**
18. Email from [REDACTED] to [REDACTED] dated 1 October 2018; Request Letter – Apparent HNA Anomalies Explained; **TRIM 2018/331051**
19. Draft LIs approving proposed Nuclear Maintenance Schedule Prefaces at 9 Magnox sites – **TRIM 2018/347290**