Office for Nuclear Regulation

EDF Energy Nuclear Generation Limited, Approval of Nuclear Power Stations Emergency Plans

Approval of Amended Hunterston B Nuclear Licensed Site Emergency Plan

Project Assessment Report ONR-OFD-PAR-20-030
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EXECUTIVE SUMMARY

Approval of amended emergency plan for EDF Energy Nuclear Generation Limited Hunterston B Nuclear Licensed Site

This Project Assessment Report describes ONR's assessment of EDF Energy Nuclear Generation Limited's (EDF-NGL's) amended emergency plan for the Hunterston B nuclear licensed site and contains recommendations for the approval of this plan by the Operating Facilities Division Director.

Permission Requested

The EDF-NGL nuclear licensed site at Hunterston B has requested ONR to approve, under Licence Condition 11(3), an amended emergency plan which, after approval, will replace the extant site emergency plan.

Background

The emergency plan at Hunterston B is approved by ONR under LC 11(2) and any amendments must be approved in accordance with LC 11(3). To comply with their obligations under the Radiation Emergency Preparedness and Public Information Regulations 2019 (REPPIR 19) the licensee has made a number of amendments to their emergency plan to reflect this legislation. The plan has also been reviewed and brought up to date to reflect new role titles. No changes have been made to the emergency response arrangements or resources deployed on sites. The implementation of the amended on-site plan follows the recent implementation of an amended off-site plan and detailed emergency planning zone by the local authority.

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

ONR's strategy for this assessment was to focus on the aspects of the emergency plan relating to compliance with REPPIR 19 legislation and confirm that the amendments do not make any significant changes to the emergency response organisation or resources deployed on the licensed site.

An ONR Emergency Preparedness and Response (EP&R) specialist and Project Inspector engaged with the licensee during the development of the NGL generic emergency plan template, which is used as a model for each licenced site's emergency plan. The licensee addressed ONR's comments in the final version before using it to develop the site-specific emergency plans. The Hunterston B emergency plan was sampled to confirm it is consistent with this model.

In consultation with EP&R, it was ensured that the local authority off-site emergency plan was mature and consistent with the on-site emergency plan. The implementation of the site emergency plan follows the recent implementation of the off-site plan.

Conclusions

To conclude, ONR is broadly satisfied that the amendments made to the Hunterston B licensed site emergency plan reflect the new REPPIR 19 legislation and the changes do not significantly change the emergency preparedness or response arrangements on the licensed site. The site's ability to deal with emergencies or incidents is not adversely affected by these amendments and the emergency plan will be compliant with legislation.

Recommendation

It is recommended that the Operating Facilities Division Director should approve the amended Hunterston B emergency plan and withdraw approval of the superseded plan.

LIST OF ABBREVIATIONS

AGR	Advance Gas Cooled Reactor
DEPZ	Detailed Emergency Planning Zone
EDF-NGL	EDF Energy Nuclear Generation Limited
EP&R	Emergency Preparedness and Response (ONR)
HOW2	(Office for Nuclear Regulation) Business Management System
LC	Licence Condition
LI	Licence Instrument
NGL	Nuclear Generation Limited
NISR	Nuclear Industries Security Regulations 2003 as amended in 2006
ONR	Office for Nuclear Regulation
REPPIR	Radiation Emergency Preparedness and Public Information Regulations

TABLE OF CONTENTS

Tables

1 PERMISSION REQUESTED

1. EDF Energy Nuclear Generation Limited (EDF-NGL) nuclear licensed site at Hunterston B has requested ONR to approve, under Licence Condition 11(3), an amended emergency plan which, after approval, will replace the extant plan.

2 BACKGROUND

2. This Project Assessment Report (PAR) describes my assessment of EDF-NGL's revised emergency plans and contains my recommendations for the approval of the plan by the Operating Facilities Division Director. This PAR covers the request from Hunterston B. Similar amendments to other NGL licenced sites emergency plans were approved as follows:

- Heysham and Hinkley B emergency plans were approved for implementation on 10 August 2020 (see ONR-OFD-PAR-20-001)
- Torness and Sizewell B plans on 02 November (see ONR-OFD-PAR-20-016 & 017)
- Dungeness B on 13 November 2020 (see ONR-OFD-PAR-20-014)
- Hartlepool on 18 November 2020 (see ONR-OFD-PAR-20-019)

3. The emergency plans on each of EDF-NGL's seven licensed sites are approved by ONR under LC 11(2) and any amendments must be approved in accordance with LC 11(3). To comply with their obligations under the Radiation Emergency Preparedness and Public Information Regulations 2019 (REPPIR 19) the licensee has made a number of amendments to their emergency plans which reflect this legislation. The plans have also been reviewed and brought up to date to reflect new role titles in EDF-NGL's organisation. No change has been made to the emergency response arrangements or resources deployed on sites.

4. The implementation of the first six amended on-site emergency plans coincided with the implementation of an amended off-site plan and detailed emergency planning zone (DEPZ) by each local authority. However, for Hunterston B the local authority didn't give the station notice that the off-site plan was being implemented during the last week in February. Consequently, the station is seeking approval of its emergency plan as soon as possible.

5. EDF-NGL operates two advance gas cooled reactors (AGRs) on the Hunterston B nuclear licenced site.

6. Licence Condition (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". Hunterston B has an extant emergency plan, which is a standalone document containing the principles for emergency preparedness and response. Detailed arrangements are described in the licensee's emergency handbook, which is a tier 2 document and based on the principles in the emergency plan. As well as meeting the requirements for site licence compliance, the plan and handbook also form the arrangements for compliance with:

- REPPIR 19
- Nuclear Industries Security Regulations 2003 as amended in 2006 (NISR)

ONR is the regulator for these regulations for the EDF-NGL sites.

7. The extant emergency plan at Hunterston B is approved by the licence instruments listed in Table 1. The associated assessment is detailed in ONR PAR ONR-OFD-PAR-18-024 (CM9 2018/369414).

Table 1 - Previously Approved Emergency Plans

Emergency Plan	Revision	Approved
Hunterston B Nuclear Power Station Emergency Plan HPS/EP	Rev 19, August 2010	LI No. 530, 23 February 2011
	Revision 20, September 2017	LI No 560, 17 January 2019 (CM9 2019/17426)
	Revision 21, April 2020	Not issued (CM9 2021/19216)

8. Hunterston B needs to revise the emergency plan to reflect:

- REPPIR 19
- Organisation name changes.
- Minor changes to align with the Emergency Handbook.
- New role titles in the Emergency Response Organisation.

9. Under LC 11(3), the licensee can only implement a new emergency plan after receiving ONR's approval. Hunterston B has therefore prepared a revised plan and submitted a letter requesting approval as shown Table 2.

Table 2 - EDF-NGL Requests for Approval of Emergency Plans

Emergency Plan	New Revision	EDF-NGL Letter
Hunterston B Nuclear Power Station Emergency Plan HPS/EP	Revision 022 CM9 2021/19835	NSL HNB50578R CM9 2021/19835

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

10. This assessment and approval has been carried out in accordance with ONR Guidance (Ref 1 & 2) and using guidance in the REPPIR 19 Approved Code of Practice (Ref 3).

11. The Hunterston B emergency plan was revised and re-approved by ONR in 2019 following amendments to reflect integration of the response to security incidents, changes to organisation, evolution of practices in emergency response and the availability of additional emergency response equipment. This latest amendment is to enable compliance with the new REPPIR 19 regulations and also constitutes the three-year review of the arrangements. For this assessment, effort has been focussed on compliance with REPPIR 19 with a broader overview taken of the other changes.

12. EDF-NGL prepared a generic emergency plan template (CM9 2020/115230), which Hunterston B used to develop the station emergency plan by incorporating site specific information where necessary. ONR engaged with the licensee's emergency planning group during development of this generic emergency plan through a series of meetings

and exchange of comments to ensure that it provided a suitable model for the individual site plans.

13. An ONR Emergency Preparedness and Response (EP&R) specialist inspector was consulted and attended key meetings with EDF-NGL. ONR comments on the generic plan were discussed with EDF-NGL's emergency planning support team and the necessary changes incorporated into the final version of the generic emergency plan. I was therefore content the generic emergency plan was adequate with respect to REPPIR 19 compliance.

14. I reviewed the generic emergency plan template and confirmed the licensee had not made any significant changes to the resources deployed for dealing with site incidents or an off-site nuclear emergency and there have been no significant changes to the emergency organisation or resources.

15. ONR identified two areas in the generic emergency plan where further detail was required to demonstrate compliance with REPPIR 19 (see below). The licensee included this information in the final version of the generic plan that was approved and issued to the licensed sites. My comments on the generic plan and confirmation that I am content for the generic plan are contained in CM9 2020/115237 and 2020/116915 respectively.

- The principles for meeting several requirements in REPPIR 19 for emergency exposures are now articulated in the plan. Detailed arrangements are given in the Emergency Handbook.
- Intentions for the consultation and cooperation required under REPPIR 19 regulations 10 and 13 are clearly defined in the plan. Detailed arrangements are given in emergency planning procedures.

16. I consulted a security specialist inspector who confirmed there were no concerns from the security EP&R perspective and that the appropriate security aspects are referenced in the generic emergency plan (CM9 2020/133565). I am therefore content there is no reason to preclude the approval of the site plans from a security perspective.

17. I sampled the Hunterston B emergency plan shown in Table 3 and confirmed it is consistent with the generic emergency plan template referenced above. I have also confirmed there has been no significant change to the sites' emergency organisation or resources as a result of the changes.

18. As part of my assessment I queried how EDF-NGL identifies people who receive emergency exposures to comply with Regulation 18(1)(a). EDF-NGL confirmed (CM9 2020/127668) that they will include this information in the new revision of the generic emergency handbook from which licensed sites will develop their arrangements.

19. I confirmed the licensee's Nuclear Safety Committee were advised of the amendment to the emergency plans and had no comments or advice regarding the plans. Minutes to the meeting on the 23 April 2020 were sent to ONR (CM9 2020/108561).

20. I discussed the new emergency plans and their implementation with the ONR EP&R team responsible for overseeing compliance with the new REPPIR 19 regulations. The conclusions of these discussions were that the emergency plans should describe the DEPZ and that ONR should be content that they are consistent with the off-site plan before approval. I discussed this with EDF-NGL and agreed that the plans will contain the DEPZ and they will seek approval when the off-site plan is ready for implementation. I have confirmed the Hunterston B plan shows the DEPZ and that the off-site plan is implemented.

4 MATTERS ARISING FROM ONR'S WORK

21. I have judged that the amended Hunterston B emergency plan is suitable for approval. On that basis I have prepared the licence instrument with accompanying letter listed in Table 3.

Table 3 - EDF-NGL Emergency Plan Approvals

Emergency Plan	Revision	Approval LI Number and Covering Letter
Hunterston B Nuclear Power Station Emergency Plan HPS/EP	Revision 022 CM9 2021/19407	LI No. 564 CM9 2020/117131 Letter HNB71318N CM9 2021/20407

22. The LI has been written in accordance with ONR guidance and is of routine type, for which the text and format have been agreed with the Government legal department. Further legal checking of these licence instruments is therefore unnecessary.

23. I have advised the SEPA that ONR is re-approving the emergency plans and have received confirmation that SEPA do not have any reasons to preclude approval of the plans (CM9 2020/140603).

5 CONCLUSIONS

24. This PAR presents the findings of my assessment of EDF-NGL's Hunterston B nuclear licensed site amended emergency plan and contains my recommendations for the approval of this plan by the Operating Facilities Division Director.

25. To conclude, I am broadly satisfied that the amendments made to the Hunterston B emergency plan reflect the new REPPIR 19 legislation and changes to role titles do not significantly change the emergency preparedness or response arrangements on the licensed site. I am content that the site's ability to deal with emergencies or incidents is not adversely affected by these amendments and the emergency plans will be compliant with legislation, reflect the latest terminology and be up to date.

26. I conclude that ONR should approve the amended emergency plan for Hunterston B nuclear licensed site.

6 RECOMMENDATIONS

I recommend the Operating Facilities Division Director should approve the amended Hunterston B emergency plan shown in Table 3 and withdraw approval of the superseded plan.

7 REFERENCES

Ref	Document
1	*ONR Guide – The Purpose and Use of Permissioning - NS-PER-GD-001 Revision 4*. March 2020. http://www.onr.org.uk/operational/assessment/index.htm
2	*ONR Nuclear Safety Technical Inspection Guide – LC 11 Emergency Arrangements - NS-INSP-GD-011 Revision 5, July 2017.* http://www.onr.org.uk/operational/tech_insp_guides/index.htm
3	*Approved Code of Practice and Guidance For The Radiation (Emergency Preparedness and Public Information) Regulations 2019,* http://www.onr.org.uk/documents/2019/reppir-19-acop-and-guidance.pdf