



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

Approval of Amended Heysham & Hinkley Point B Nuclear Licensed Sites Emergency Plans

Project Assessment Report ONR-OFD-PAR-20-001
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EXECUTIVE SUMMARY

Approval of amended emergency plans for EDF Energy Nuclear Generation Limited Heysham and Hinkley Point B Nuclear Licensed Sites

This Project Assessment Report describes ONR's assessment of EDF Energy Nuclear Generation Limited's (EDF-NGL's) amended emergency plans for Heysham and Hinkley Point B nuclear licensed sites and contains recommendations for the approval of these plans by the Operating Facilities Division Director.

Permission Requested

EDF-NGL nuclear licensed sites at Heysham and Hinkley Point B have requested ONR to approve, under Licence Condition 11(3), amended emergency plans which, after approval, will replace the extant site emergency plans.

Background

The emergency plans at Heysham and Hinkley Point B 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 post titles. No changes have been made to the emergency response arrangements or resources deployed on sites. The implementation of the amended on-site plan will coincide with the 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 plans relating to compliance with the new 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 sites.

An ONR Emergency Preparedness and Response (EP&R) specialist and Project Inspector engaged with the licensee during the development of their 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 Heysham and Hinkley Point B emergency plans were sampled to confirm they were consistent with this model.

In consultation with EP&R, it was ensured the local authority off-site emergency plans were mature and consistent with the on-site emergency plans. The implementation of the two plans will coincide.

Conclusions

To conclude, ONR is satisfied that the amendments made to the Heysham and Hinkley Point B licensed sites emergency plans 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 plans will be compliant with legislation.

Recommendation

It is recommended that the Operating Facilities Division Director should approve the amended Heysham and Hinkley Point B emergency plans and withdraw approval of the superseded plans.

LIST OF ABBREVIATIONS

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

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1 PERMISSION REQUESTED

1. EDF Energy Nuclear Generation Limited (EDF-NGL) nuclear licensed sites at Heysham and Hinkley Point B have requested ONR to approve, under Licence Condition 11(3), amended emergency plans which, after approval, will replace the extant plans.

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 these plans by the Operating Facilities Division Director. This PAR covers the requests from Heysham and Hinkley Point B, the first sites to seek approval; subsequent PARs will cover the approvals for the remaining five sites which are expected to be spread over the next 5-7 months.

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 (REPPPIR 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 post titles in EDF-NGL's organisation. No change has been made to the emergency response arrangements or resources deployed on sites.

4. At each site the implementation of the amended on-site emergency plan will coincide with the implementation of an amended off-site plan and Detailed Emergency Planning Zone (DEPZ) by the local authority. ONR approval of each site emergency plan therefore reflects the local authority's implementation schedule.

5. EDF-NGL operates four advanced gas cooled reactors (AGRs) on the Heysham nuclear licensed site (Heysham 1 and Heysham 2) and two on the Hinkley B nuclear licensed 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". Heysham and Hinkley Point B have extant emergency plans, which are standalone documents 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:

- REPPPIR 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 plans at Heysham and Hinkley Point B were 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
Heysham 1 and 2 Nuclear Power Stations Emergency Plan HEY/EMGY/1	Issue 17 Issue 9, March 2007	LI No. 531; 5 April 2007
	Revision 018, September 2017	LI No. 621, 17 January 2019 (CM9 2019/17394)
Hinkley Point B Nuclear Power Station Emergency Plan HINB/EHB/SEC/01	Revision 005, April 2007	LI No 517, 30 April 2007
	Revision 012, September 2017	LI No 558, 17 January 2019 (CM9 2019/17414)

8. Heysham & Hinkley Point B need to revise the emergency plans to reflect:
- REPIR 19
 - Organisation name changes.
 - Minor changes to align with the Emergency Handbook.
 - New post titles in the Emergency Response Organisation.
9. Under LC 11(3), the licensees can only implement new emergency plans after receiving ONR's approval. Heysham and Hinkley Point B have therefore prepared the revised plans 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
Heysham 1 and 2 Nuclear Power Stations Emergency Plan HEY/EMGY/1	Revision 019 July 2020 CM9 2020/226441	HYB/51119R CM9 2020/226436
Hinkley Point B Nuclear Power Station Emergency Plan HINB/EHB/SEC/01	Revision 013 July 2020 CM9 2020/226427	NSL HPB 51434 R CM9 2020/226425

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 REPIR 19 Approved Code of Practice (Ref 3).
11. The Heysham and Hinkley Point B emergency plans were 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 REPIR 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 Heysham and Hinkley Point B used to develop the station emergency plans 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 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 he had 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 Heysham and Hinkley Point B emergency plans shown in Table 3 and confirmed they are 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 23rd 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 the plans will contain the DEPZ and they will seek approval when the off-site plan is ready for implementation. I have confirmed the Heysham and Hinkley Point B plan shows the DEPZ and that the off-site plan is ready for implementation.

4 MATTERS ARISING FROM ONR'S WORK

21. I have judged that the amended Heysham and Hinkley Point B emergency plans are suitable for approval. On that basis I have prepared the licence instruments with accompanying letters listed in Table 3.

Table 3 - EDF-NGL Emergency Plan Approvals

Emergency Plan	Revision	Approval LI Number and Covering Letter
Heysham 1 and 2 Nuclear Power Stations Emergency Plan HEY/EMGY/1 HB/REPS/RH016)	Revision 019 July 2020 CM9 2020/226441	LI No. 629 CM9 2020/117101 Letter No. HYA71140N
Hinkley Point B Nuclear Power Station Emergency Plan HINB/EHB/SEC/01	Revision 013 July 2020 CM9 2020/226427	LI No. 563 CM9 2020/117114 Letter No. HPB71786N

22. These LIs have been written in accordance with ONR guidance and are 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 Environment Agency (EA) (CM9 2020/122421) that ONR is re-approving the emergency plans and have received confirmation that EA do not have any reasons to preclude approval of the plans (CM9 2020/142542).

5 CONCLUSIONS

24. This PAR presents the findings of my assessment of EDF-NGL's Heysham and Hinkley Point B nuclear licensed sites amended emergency plans and contains my recommendations for the approval of these plans by the for Operating Facilities Division Director.
25. To conclude, I am satisfied that the amendments made to the Heysham and Hinkley Point B emergency plans 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. The sites' 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 plans for Heysham and Hinkley Point B nuclear licensed site.

6 RECOMMENDATIONS

I recommend the Operating Facilities Division Director should approve the amended Heysham and Hinkley Point B emergency plans shown in Table 3 and withdraw approval of the superseded plans.

7 REFERENCES

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