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| **Assessment Report** |
| **Unique Doc. ID:**  | ONR-OFD-AR-22-049 | **Issue No.:** | 1 |
| **Record Reference:** | 2022/68974 |
| **Project:** | EIADR – Pre-Application Opinion |
| **Site:** | Hinkley Point B Nuclear Power Station |
| **Title:** | Hinkley Point B Nuclear Power Station - Environmental Statement Pre-Application Opinion |
| **Nuclear Site Licence No.:** | 62C |
| **Licence Condition(s):** | NA |
| **ONR Assessment Rating (Mandatory):** | Green |

Table 1: Step-based document review

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Step | Description | Role | Name | Date | Revision No.[[1]](#footnote-1) |
| 1 | Initial Draft, including identification and mark-up of SNI/CCI | Author | [REDACTED] | 29/11/22 | 2022/68974Revision 4 |
| 2 | Main editorial review | Author | [REDACTED] | 30/11/22 | 2022/68974Revision 6 |
| 3 | Peer Review in accordance with NS-PER-GD-016 | Peer Reviewer | [REDACTED] | 05/12/22 | 2022/68974Revision 6 |
| 4 | Assessor update / sentencing of comments and return to Peer Reviewer | Author | [REDACTED] | 06/12/22 | 2022/68974Revision 6 |
| 5 | Final editorial / clean draft review | Author | [REDACTED] | 07/12/22 | 2022/68974Revision 7 |
| 6 | Acceptance review in accordance with NS-PER-GD-016 | Professional Lead | [REDACTED] |  |  |
| 7 | Report Sign-off | Author/ Peer Reviewer/ Professional Lead | [REDACTED] | 07/12/22 | 2022/68974Revision 8 |

Table 2: Document acceptance

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Role | Name | Position | Signature | Date | CM9 reference for review |
| Author | [REDACTED] | Inspector | [REDACTED] | 07/12/22 | N/A |
| Peer Review[[2]](#footnote-2) | [REDACTED] | Inspector | [REDACTED] | 07/12/22 | Of completed form (see annex 1 NS-PER-GD-016) |
| Acceptance[[3]](#footnote-3) | [REDACTED] | Nuclear Liabilities Regulation Professional Lead  | [REDACTED] | 07/12/22 | Of completed form (see annex 2 NS-PER-GD-016) |

Table 3: Revision history

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Issue No.: | Date | Author(s) | Reviewed By | Accepted By | Description of Change |
| 1 | 07/12/22 | [REDACTED] | [REDACTED] | [REDACTED] | First formal issue |

Table 4: Circulation list

|  |  |
| --- | --- |
| Organisation | Name |
| Office for Nuclear Regulation | [REDACTED], DCI, SDFW[REDACTED], DCI, OFD[REDACTED], Head of Operating Reactors[REDACTED], SI, Head of DFW [REDACTED], NLR Professional Lead[REDACTED], NLR Nuclear Equivalent Inspector[REDACTED], NLR Principal Inspector[REDACTED], NLR Specialist Inspector[REDACTED]AGR EoG Project Inspector, Operating Reactors job title[REDACTED], Hinkley Point B Site Inspector, Operating Reactors.Files: Division Report FileCM9 Folder 4.11.321. |
| Environment Agency | [REDACTED], EA Site Inspector for Hinkley Point B  |
| Licensee | [REDACTED]EIA Co-ordinator Nuclear Decommissioning, EDFE [REDACTED], Nuclear Decommissioning EDFE.  |

Hinkley Point B Power Station

Environmental Statement Pre-Application Opinion

Assessment Report Ref.: ONR-OFD-AR-22-049

Issue No.: 1

Date: 7 December 2022

# Executive Summary

**Permission Requested**

EDF Energy (EDFE) has asked the Office for Nuclear Regulation (ONR) to provide an opinion on the proposed format and content of an application for consent to decommission the Hinkley Point B Nuclear Power Station under the Nuclear Reactors (Environmental Impact Assessment for Decommissioning) Regulations 1999 (as amended) (EIADR).

**Background**

ONR is the enforcing authority for EIADR. EIADR is a legal instrument that requires the environmental impact of decommissioning nuclear power stations, and other nuclear reactors, to be considered in detail before consent for the decommissioning work to commence is given. When applying for EIADR consent, the licensee submits an Environmental Statement (ES) to ONR, which includes the Environmental Impact Assessment (EIA) for the decommissioning project.

EIADR provides for the applicant to seek the opinion of ONR on what should be included in the scope of the ES. EDFE has submitted a scoping report to ONR laying out the proposed format and content of their ES, and the scope of the EIA, and requested ONR provide a Pre-Application Opinion (PAO).

**Assessment work carried out by ONR in the consideration of this request**

ONR consulted with the statutory consultation bodies (as defined in regulation 2 of EIADR) and additional consultation bodies with whom ONR considered it appropriate to consult, for a period of one month. Consultation responses were considered and incorporated into the feedback if deemed appropriate by ONR. Where we have received comments on style or comments relevant to the Scoping Report rather than the ES, these will be shared as part of the debrief process held with the licensee. All consultation responses have been provided in full to the licensee.

A Technical Support Contractor (TSC) was used to review the scoping report and provide independent expert advice on the submission to help inform ONR’s PAO.

**Conclusions**

Overall, ONR considers that the proposed scope of the ES for the Hinkley Point B decommissioning project is appropriate and addresses the relevant environmental topic areas and impacts required by the regulations. However, ONR has highlighted a number of specific points and issues that should be addressed in the ES to ensure that the requirements of the legislation can be fully met. Specific examples of where the scoping report could be strengthened for EDFE’s consideration are included in Appendix 2.

# List of Abbreviations

DMRB Design Manual for Roads and Bridges

DWPF Decommissioning Waste Processing Facility

EIA Environmental Impact Assessment

EIADR Environmental Impact Assessment for Decommissioning) Regulations 1999 (as amended)

ES Environmental Statement

EDFE EDF Energy

EMP Environmental Management Plan

EoG End of Generation

GRR Guidance on Requirements for Release from Radioactive Substances Regulation;

HPA Hinkley Point A Site

HPB Hinkley Point B Site

HPC Hinkley Point C Site

HRA Habitat Regulations Assessment

IEMA Institute of Environmental Management and Assessment

ILW Intermediate Level radioactive Waste

NDA Nuclear Decommissioning Authority

NRMM Non-Road Mobile Machinery

ONR Office for Nuclear Regulation

OWPF Operational Waste Processing Facility

PAO Pre-Application Opinion

SAC Special Area of Conservation

SMP Seabird Monitoring Programme

SPA Special Protection Areas

SSSI Site of Special Scientific Interest

TSC Technical Support Contractors

WFD Water Framework Directive

WMC Waste Management Centre

Zol Zone of Influence

Table of Contents

[Executive Summary 6](#_Toc121301239)

[List of Abbreviations 7](#_Toc121301240)

[1. Introduction 9](#_Toc121301241)

[1.1. Issue 9](#_Toc121301242)

[1.2. Background 9](#_Toc121301243)

[2. Approach 9](#_Toc121301244)

[2.1. Consultation 9](#_Toc121301245)

[2.2. Use of a Technical Support Contractor 9](#_Toc121301246)

[3. ONR’s Pre-Application Opinion 10](#_Toc121301247)

[3.1. Reservations 10](#_Toc121301248)

[3.2. Observations 11](#_Toc121301249)

[3.3. Comments 18](#_Toc121301250)

[4. Next stages of the EIADR Processes 20](#_Toc121301251)

[5. Contact Information 20](#_Toc121301252)

[Appendix 1 – Consultees on the Scoping Report 21](#_Toc121301253)

[Appendix 2 – Reservations and Observations: Specific Examples 23](#_Toc121301254)

Introduction

Issue

EDF Energy (EDFE) has asked the Office for Nuclear Regulation (ONR) to provide an opinion on the proposed format and content of an application for consent to decommission the Hinkley Point B Nuclear Power Station under the Nuclear Reactors (Environmental Impact Assessment for Decommissioning) Regulations 1999 (as amended) (EIADR).

Background

ONR is the enforcing authority for EIADR. EIADR is a legal instrument that requires the environmental impact of decommissioning nuclear power stations, and other nuclear reactors, to be considered in detail before consent for the decommissioning work to commence is given.

An application for consent under EIADR will primarily include an Environmental Statement (ES), which presents an Environmental Impact Assessment (EIA), for the project. The information to be included in an ES is referred to and specified in Schedule 1 of EIADR. The application for consent is subject to stakeholder consultation before consent is granted.

EIADR provides for the applicant to seek the opinion of ONR on what should be included in the scope of the ES. EDFE has submitted a scoping report to ONR laying out the proposed format and content of their ES and requested ONR provide a Pre-Application Opinion (PAO). As part of the PAO process, ONR is required to seek the opinion of key stakeholders via a consultation.

Approach

Consultation

ONR has consulted with the statutory consultees (as defined in regulation 2 of EIADR) and other bodies with whom ONR considered it appropriate to consult, for a period of one month. The list of consultees is provided in Appendix 1.

ONR received a number of responses from the consultation. Consultation responses were considered and incorporated if deemed appropriate by ONR. Where we have received comments on style or general comments these have been shared as part of in debrief process held with the licensee. All consultation responses have been provided in full to the licensee.

Use of a Technical Support Contractor

A TSC with expertise in EIA was used to review the scoping report and provide an independent review of the submission to help inform ONR’s PAO.

ONR’s Pre-Application Opinion

The Hinkley Point B scoping report presents the proposed format and content of an application for consent to decommission the Hinkley Point B Nuclear Power Station under EIADR.

After due consideration of the scoping report and taking into account comments received from the consultation and the expert EIA advice received from the TSC, ONR found the proposed scope to be appropriate and to provide sufficient information, but a number of specific points and issues are highlighted that should be addressed in the ES to ensure that the requirements in the legislation can be fully met.

ONR’s opinion is provided below. Feedback has been graded as a ‘reservation’, ‘observation’ or ‘comment’ to assist EDFE in prioritising them; these are defined as follows:

Reservation – a matter that if not addressed could mean that the ES may not explicitly meet all the requirements under EIADR and could be open to challenge from ONR and stakeholders during the ES assessment and associated consultation.

Observation – a matter that should be considered in the EIA and documented in the ES in order to strengthen it and ensure that it provides adequate information.

Comment – other matters for consideration that may improve the presentation of the ES.

The feedback provided has been organised into ‘themes’, for example ‘EIA Methodology’ or ‘Future Baseline’. Further guidance is provided in the sections below. Where observations raised were relevant to a number of topic chapters further examples from specific chapters have been provided in Appendix 2.

Reservations

The reservations on the scoping report are detailed below for EDFE’s consideration. ONR’s opinion is that if the ES was based on the scope presented in the scoping report, then it may not meet all the requirements under EIADR.

Environmental Impact Assessment Process

In section 4.6 of the scoping report, a preliminary assessment for both intra-project and inter-project cumulative effects has not been provided to demonstrate if potential significant effects could occur and thus whether this is scoped in or out of the EIA. The ES should include an assessment of cumulative effects and provide clear rationale on how the study area was defined for the assessment. In addition, the choice of projects/developments included in the assessment of cumulative effects should be clearly justified. Specific examples relevant to this reservation have been included in Appendix 2 of the PAO.

In section 4.7 of the scoping report (Transboundary Effects), there is insufficient information and evidence to conclude whether a European Economic Area State could be significantly affected. The information provided is focused on radiation doses to members of the public but does not consider other potential significant effects on the environment, or other social aspects. The likely significant transboundary effects should be considered further in the EIA process and reported in the ES.

Omissions from the Scoping Report

In the environmental topic chapters, there are a number of receptors and aspects that do not appear to have been considered in the scoping exercise. These include:

 impacts to human health;

impacts to maritime recreation and commercial services (relevant to socio-economic and traffic and transport impact assessments);

 impacts to agricultural land use (relevant to socio-economic and soils and geology impact assessments);

resource and material use;

impacts to marine archaeology; geoarchaeology and to the historic landscape.

This should be considered further in the EIA process and the ES should clearly report on whether these aspects are in scope of the EIA.

In the Climate Change Chapter of the scoping report (chapter 6), although it is recognised that the scope of the EIA should include consideration of the vulnerability of the project to climate change (also known as climate change resilience), climate change resilience is not considered further in this chapter. The scoping report states that “a semi-quantitative projection of future climate conditions at the site based on the UK Climate Change Projections 2018 will be presented as an appendix to the climate change chapter in the ES”, however, information on how this data will be used in the EIA to determine significant effects has not been provided in the scoping report. This should be clarified in the ES.

Observations

The following observations are relevant to a number of topic chapters in the scoping report and have been arranged under the following themes:

EIA Methodology – focused on the proposed EIA methodology, including the legislation, policy and guidance referenced and the proposed assessment methods.

Future Baseline – focused on the how the future baseline has been determined and any assumptions/limitations of this.

Uncertainty – focused on the approach and method of managing uncertainty and limitations in the EIA.

Decommissioning Project Scope – focused on what is considered as the being in scope of the EIADR decommissioning project.

Environmental Baseline – focused on the baseline presented in the scoping report

Evidence – focused on the evidence that has been provided to inform the conclusions of the scoping exercise.

Proposed EIA Scope – focused on how the EIA scope has been defined and if it is deemed suitable, or if the assessment has considered all potential effects sufficiently.

Assessment Interactions – focused on the coordination of the EIADR EIA with other assessments.

Where relevant, specific examples of these observations in the topic chapters are provided in Appendix 2.

EIA Methodology

EIADR requires a description of the factors likely to be significantly affected by the project as well as a description of the likely significant effects of the project on the environment (Schedule 4). Where there is potential to cause a significant effect in the project lifetime, these should be assessed. Some topic chapters in the scoping report have only reported likely significant effects in the ‘worst’ phase of the project (in every case this is the Preparations for Quiescence Phase), which is not considered as good practice. The ES should report all likely significant effects across the duration of the project.

The Scoping Report does not refer to some relevant good practice within the topic chapters, in particular guidance that is relevant for determining the significance of environmental effects. Specific examples are included in Appendix 2. This should be considered further in the EIA process.

1. The proposed assessment methodology follows relevant good practice, however, the year of each phase of the decommissioning project on which the scoping exercise was based has not been clearly defined. Due to the long duration of the project (~96 years), the three discrete phases of work, and potential changes to the baseline (both influenced by the project (i.e. changes on site) and not influenced by the project (i.e. changes off site), setting specific years (the worst-case year) for the EIA should be considered. This could be consistent for each topic assessment or vary; either way a justification should be provided.
2. Many of the topic chapters do not clearly define the study areas for the scoping exercise or the EIA and do not justify the choice of the study area. The ES should clearly define and justify the study areas and illustrate them where possible, for example on a figure.

Paragraph 4.3.9 of the scoping report states that the environmental effects of the project will be compared to the current baseline before the project commences. The Scoping Report recognises that the current baseline on and around the site will likely alter between now and the commencement of the decommissioning project, for example, discharges via the outfall may reduce and therefore there will be a change to the marine environment. How these changes to the baseline are to be considered in the assessment has not been addressed adequately and should be considered in the EIA and reported in the ES.

Within the topic chapters, there is inconsistency when determining the significance of effects. An overarching significance matrix is provided in Table 4.3 of the scoping report, however in some of the topic chapters there is no reference to this matrix or methodology for how significant effects will be determined. Whilst it is appropriate for the matrix to be adapted for each topic area, there should be consistency in the information provided.

In some instances within the topic chapters, the EIA methodology does not provide sufficient information to justify the approach adopted. For example, in the Marine Biodiversity chapter (Chapter 8), paragraph 8.5.10 refers to the ‘importance’ of ecological features and how this will be categorised, however, it is not clear how ‘importance’ is defined, and all marine receptors that are potentially affected by the project (regardless of their importance) should be included in the scope of the assessment. Further examples are provided in Appendix 2.

The information used in the proposed EIA scope to determine impacts and assess effects is limited with regards to modelling. For example, in the Coastal Management and Water Quality chapter (Chapter 9), information is provided on modelling of hydrology, sediment transport, erosion and deposition that has been done to inform the effects on coastal management. The chapter also recognises that marine infrastructure can affect hydrodynamics, sediment processes and water quality and states that there are potential effects relating to tidal transport of sediments (and potentially contaminants) mobilised by the decommissioning activities over a distance of approximately 15 km in the flood tide direction and 15 km in the ebb tide direction. Further modelling may therefore be required to investigate transport pathways and accretion, informed by the rate and nature of sediment released into the water column during the various marine infrastructure decommission activities.

Future Baseline

 ONR recognises that due to the long durations of the decommissioning project, the amount of detail known for the later stages of the project will be limited. Whilst this uncertainty is acceptable, the scoping report does not indicate how the future phases (e.g. Final site Clearance) will be assessed and reported in the ES. Paragraph 4.3.10 of the scoping report defines what a future baseline is, however, it is not clear what method has been used to determine the future baseline for the scoping exercise and for the EIA. The ES should provide further detail on how the future baseline has been determined, recognising any uncertainties and assumptions that have been made.

Further to this, ONR notes the scoping report recognises that interim consideration of the evolving baseline will be required due to the extended duration of the decommissioning project and states that “interim reviews will be built into the decommissioning programme and refinements to assessments implemented as necessary”. It would be useful for the ES to provide an outline approach to how interim reviews will be undertaken in order to manage uncertainties and limitations as the project progresses.

There is a general lack of information on how the future baseline has been defined for the purpose of the scoping exercise and for the EIA across all topic areas. A consistent approach to defining and describing the future baseline should be applied to the ES.

Consultee comments noted that relevant local plans, such as the Somerset’s School Place Planning Infrastructure Growth Plan and Local Plans for housing developments, could be considered in order to inform future baseline as they will include information on planned development in the local area.

Uncertainty

As expected at the scoping stage, there is a level of uncertainty and limitations to the assessment. The scoping exercise is based on initial baseline data and limited project information. Uncertainties and limitations encountered during the scoping exercise have not been clearly documented, nor has an approach to be used to address or manage these in the EIA been set out. Clarity on the management of uncertainties and limitations should be provided in the ES.

Decommissioning Project Scope

In general, there is uncertainty across the scoping report on what activities are considered in the scope of the EIADR project and thus to be included in the EIA. While a description of the decommissioning process is provided in section 2 of the scoping report, there is uncertainty on when the current operational phase (defueling) ends, and the Preparations for Quiescence Phase commences (section 2.3). As decommissioning plans are developed and more information becomes available, further detail should be provided in the ES to provide clarity. Further examples of where the definition of the scope of the decommissioning project could be refined in the ES are included in Appendix 2.

It is noted that potential mitigation measures have not been considered as part of the Scoping Report. It is advised that potential mitigation measures are considered at an early stage as they may impact whether particular decommissioning activities remain feasible, i.e. if the mitigation measures required for a particular activity were disproportionate or unpracticable.

Environmental Baseline

The Scoping Report is based on a certain level of baseline information, and it is recognised that further baseline data is to be collected during the EIA process.

There are a number of areas in which the baseline data and analysis in the topic chapters in the scoping report could be strengthened; specific examples have been provided in Appendix 2. The following should be considered for the ES in terms of providing sufficient baseline information:

activities in the marine environment – navigation, shipping, commercial fishing, dredging;

human health;

vibration sources;

agricultural land use;

resource and material use;

marine archaeology and shipwrecks;

geoarchaeology;

historic landscape;

buried archaeological features and non-designated heritage assets;

ecological and heritage receptors along the highways that may be affected;

hydrodynamics (e.g. tidal range, tidal velocities, wave climate); and

night-time lighting.

Evidence

In some of the topic chapters in the scoping report there is insufficient information/evidence provided to understand what impact the decommissioning activity could cause. The lack of information results in uncertainty on how the receptors will be affected and therefore it is not clear if there is potential to cause significant effects. The rationale behind why receptors are scoped in or out is therefore not provided in sufficient detail to draw a confident conclusion. If a method to manage uncertainty was set out and assumptions made to accommodate these limitations, this may support the conclusions drawn (see section 3.2.3).

In addition, in a number of instances in the topic chapters, the activity presented in the potentially significant effects table does not indicate the Phase of works in which the activity occurs, therefore there is some repetition and uncertainty on the proposed scope.

Examples of lack of evidence to support the conclusions of the scoping exercise:

No indication of transport movements to inform the traffic and transport assessment.

No indication of employment numbers to inform the socio-economic assessment.

The socio-economic assessment suggests that there is currently not a high pressure on GPs in Somerset compared to the national average. This statement is potentially misleading as patients per GP cannot be considered in isolation, it needs to also be reconciled with the population age profile of the area.

Limited information on deconstruction methods to inform the noise assessment and type and volume of wastes produced to inform the waste assessment.

Limited information is provided on the design of the Safestore and other facilities, infrastructure and buildings on site lasting the duration of the project and how they will be resilient to climate change.

* In relation to the Quiescence Phase, information on how the site will be managed during this phase, in particular with reference to vegetation growth and species inhabiting the area, is missing.
* Limited information on the potential environmental impacts of the decommissioning of marine infrastructure: the demolition of the intake structure to seabed level and the breaking up of the outfall structure at the head of the outfall channel (as detailed in Section 2 of the scoping report) may cause adverse effects on marine receptors. In addition to this, further information on the timing of this work is required in order to assess the potential cumulative effects with other marine activities and in-combination impacts in the Habitats Regulations Assessment.

A number of consultation comments noted the age of surveys and data used in the scoping report and the need for up-to-date information to be used in the EIA process. For example, the surveys for the presence of Great Crested Newts and Water Voles are three years out of date and therefore the conclusions of the scoping exercise may not be substantiated by up-to-date evidence. In addition to this, the latest climate change projections published on gov.uk should be used when considering future climate change impacts.

Proposed EIA Scope

In some of the topic chapters, the scoping report appears to have not considered certain receptors and potential environmental impacts of the decommissioning project. There is therefore a risk that the scope is either too wide or that some effects or receptors have been scoped out too soon.

Through the iterative EIA process, further scoping should be undertaken on those receptors/ effects that have not been considered sufficiently as more information becomes available and any changes to the scope should be substantiated in the ES. The following areas should be considered:

Impacts from increased traffic on the highway to biodiversity and heritage receptors.

Impacts to the marine environment that may have an indirect effect to birds.

Buried archaeological features and non-designated heritage assets.

Impacts to the AONB.

Impacts to noise sensitive receptors.

Further specific examples are provided in Appendix 2.

Assessment Interactions

Paragraph 3.2.3 of the scoping report sets out Directives that are relevant to the decommissioning project, however, it does not describe the interactions with the EIA carried out for the purposes of EIADR. In addition to this, the Habitats Regulations Assessment (HRA) is referred to in Table 8.7 but there is a lack of information on how the findings of this assessment will be considered in the EIA and reported in the ES. Regulation 4A of EIADR requires that the EIA is coordinated with assessments carried out under the Habitats Regulations.

The ES should include a description of interactions with other relevant assessments (for example the HRA and Water Framework Directive), and other regulatory requirements (e.g. safety case documentation and environmental permits), for example where assessment findings have been shared and used.

In addition, there is no mention of the Biodiversity Benchmark from the Wildlife Trusts that is held by Hinkley Point B. This is a useful source of biodiversity information, and the station management system is subject to external audits by the Wildlife Trust so it may be beneficial for this to be referenced in the ES.

Comments

The following comments are relevant to a number of topic chapters in the scoping report and have been arranged under the following themes:

Structure – focussed on the structure and proportionality of the scoping report and ES.

Clarity – focused on the clarity of the information reported.

EIA Methodology – focused on the proposed EIA methodology, including the legislation, policy and guidance referenced and the proposed assessment methods.

Consultation – focussed on the consultation undertaken to date, future proposed consultation and consultation approach.

Structure

Within the scoping report, some environmental aspects are covered in more than one topic chapter. It would be beneficial ES to identify where different receptors and environmental factors are considered in the report. For example, paragraph 9.1.2 of the Coastal Management and Water Quality chapter in the scoping report clearly sets out what is to be included in the assessment, whereas this is not as clearly articulated in other chapters.

The use of figures to optimise presentation of information to facilitate understanding of assessment outputs should be considered in the ES. For example, for many of the topics, study areas have not been illustrated on a figure and aspects of the baseline are absent. In Chapter 7 (Terrestrial and Freshwater Biodiversity) it would be useful to have a figure that provided a summary of the baseline, in particular habitats within the 3km Works Area.

Common information that provides a foundation for the EIA could be included in the upfront chapters to avoid the need for repetition in the topic chapters. For example, the context of the surrounding environment and potential sensitive receptors and resources that could be affected by the decommissioning project could be provided upfront such as a description of the RAMSAR site, Site of SSSI and SPA.

Clarity

Where multiple study areas have been defined for a topic area, it should be clear how they have been defined and whether they are the study areas for the purposes of the scoping exercise or the EIA. For example, in Chapter 5 (Air Quality), a study area for decommissioning traffic movements and road traffic emissions is provided but the study area for dust risk assessments is omitted. In addition, in Chapter 14 (Noise and Vibration), three study areas are defined but it is unclear how these study areas have been justified and which will be used for the scoping of the EIA.

Some surveys are referred to but not referenced in the scoping report, for example, in paragraph 8.3.3 a range of ecological surveys undertaken from 2020 to 2022 are mentioned.

EIA Methodology

The Scoping Report does not provide information on NDA policy, procedure and strategy that would be adopted once the site transfers to NDA ownership. For example, Chapter 7 (Terrestrial and Freshwater Biodiversity) does not refer to any specific NDA/Magnox Biodiversity Plans. Information on any NDA policies, procedures and strategies relevant to environmental management could be included in the ES.

There are a number of potential omissions in the Legislation, Policy and Guidance section of the scoping report (Chapter 3), for example, Conservation of Offshore Marine Habitats and Species Regulations 2017 and relevant policies in the Local Plan. A full review and consideration of relevant legislation, policy and guidance applicable to the EIA should be documented in the ES, including an explanation of why they are relevant and how they have been considered in the EIA.

In addition to this, there are potential omissions in the ‘relevant legislation, policy and technical guidance’ sections of the topic chapters, for example, in Chapter 7 (Terrestrial and Freshwater Biodiversity), the local councils existing environmental policies are not referenced. In addition Chapter 6 (Climate Change) does not reference the Fluorinated Greenhouse Gases Regulations 2015 which may be relevant to the project.

Consultation

There is an inconsistent approach to how consultation is documented in the topic chapters in the scoping report. Some chapters focus on what has been undertaken to inform the scoping exercise and others focus on what consultation is to occur prior to the finalisation of the ES. In some instances, it is not clear what has been consulted on and why.

1. Natural England has not been included as a consultee in Chapter 7 (Terrestrial and Freshwater Biodiversity) and Chapter 13 (Landscape and Visual Impact Assessment). In addition, any future consultation undertaken to inform the EIA has been omitted.
2. Chapter 11 (Soils and Geology) states that consultation has not been undertaken to date and will be carried out to refine the scope and assessment methodology. This is not deemed good practice as consultation should have been carried out as part of the scoping exercise to determine the assessment methodology.
3. In Chapter 13 (Landscape and Visual Impact Assessment) it was noted in the consultation responses that the relevant District Council should also be consulted in addition to the County Council as they will be the Local Planning Authority.

 The ES should set out what consultation has been done, who has been consulted, how it was undertaken, and what the outcome was.

Next stages of the EIADR Processes

When appropriate, the licensee will progress with the production of the ES and submit this to ONR as an application for EIADR consent. At this stage The ES is subject to a 90-day public consultation, following which ONR will make a decision on whether to grant consent for the decommissioning project described.

Contact Information

The ONR EIADR Team can be contacted via contact@onr.gov.uk

General information on EIADR can be found at: <https://www.onr.org.uk/eiadr.htm>

Appendix 1 – Consultees on the Scoping Report

|  |
| --- |
| **Statuary Consultees**Somerset County CouncilSomerset West and Taunton Council Sedgemoor District CouncilSouth Somerset District CouncilMendip District CouncilNorth Somerset CouncilEnvironment AgencyNatural England |

**Other Consultees**

|  |
| --- |
| Ambulance Service |
| Avon and Somerset Police |
| Cannington Parish Council |
| Commoners Association |
| Crown Estates |
| Exmoor National Park Authority |
| Fiddington Parish Council |
| Food Standard Agency |
| Friends of the Earth |
| Greenpeace |
| Health and Safety Executive |
| Hinkley Point Site Stakeholder Group for A and B Sites |
| Historic England |
| Holford Parish Council  |
| Magnox Ltd |
| Marine Management Organisation |
| Ministry of Defence (MOD) |
| National Air Traffic Services |
| National Grid |
| National Highways |
| Nether Stowey Parish Council |
| Nuclear Decommissioning Authority  |
| Nuclear Free Local Authorities |
| Otterhampton Parish Council |
| Quantock Hills AONB |
| RSPB |
| Somerset Drainage Board Consortium |
| Somerset Waste Partnership |
| Somerset Wildlife Trust and Wildfowl and Wetlands Trust |
| South West NHS |
| Spaxton Parish Council |
| Stockland Bristol Parish Council |
| Stogursey Parish Council |
| Stop Hinkley |
| Stringston Parish Council |
| Wessex Water |

Appendix 2 – Reservations and Observations: Specific Examples

The below table includes specific examples of the reservations and observations raised on the scoping report.

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| **Theme** | **Reservation** | **Feedback Example(s)** |
| EIA Process | It is not clear how the cumulative impacts of other projects and developments, for example HPA and HPC, have been considered in the scoping report, and how the assessment of the cumulative effects will be undertaken in the EIA. The cumulative impact assessment in the ES should provide clear rationale on how the study area was defined and the choice of projects/developments included in the assessment should be clearly justified. | * The Scoping Report clarifies that the ZoI will be defined by each environmental topic and be combined into a single area. This approach is deemed suitable, however the rationale for this ZoI has not been provided, for example the ZoI could be considered as being the greatest ZoI of a topic.
* Within Appendix 4A (Cumulative Effects Assessment – Other Development), a number of developments including HPA and the Bridgewater Tidal Barrier Scheme have not been included. These could be omissions and should be reviewed for the EIA. If not included, a justification should be provided. The method for determining the initial list has not been included, nor has a description of how cumulative effects could occur.
* It is noted that the list of developments provided in Appendix 4A is preliminary and should be updated to reflect strategic development set out in the Sedgemoor and Somerset West and Taunton Local Plans, given the timescales for decommissioning. In addition to this, the Gravity Local Development Order should also be considered.
* What is covered in the future baseline and what is covered in the cumulative impact assessment should be considered and double counting should be avoided. The methodology also does not provide assessment years and how future phases will be assessed.
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| **Theme** | **Observation** | **Feedback Example(s)** |
| EIA Methodology | The Scoping Report does not refer to some relevant good practice within the topic chapters, in particular guidance that is relevant for determining the significance of environmental effects. This should be considered further in the EIA process. | * In Chapter 18 (Conventional Waste) paragraph 18.2.5 and Table 18.3 of technical guidance do not include the IEMA guide to: Materials and Waste in Environmental Impact Assessment (2020) or the Design Manual for Roads and bridges, LA110 Material assets and waste (2019). These guidance documents provide criteria for significance and magnitude of effect.  The Scoping Report does not provide any justification of how/why the significance or magnitude has been decided and the criteria is not clear.  Typically, a percentage of capacity occupied is used rather than a m3 volume of waste generated. The IEMA and DMBR guidance should be considered as part of the EIA methodology. If they are not to be used, a justification should be provided in the ES.
* No reference made to The Guidelines for the Environmental Assessment of Road Traffic published by the Institute of Environmental Assessment in 1993 (now IEMA) or Highways England DMRB LA112 – Population and Human Health, in particular for guidance on determination of significance of environmental effects, reporting and monitoring.
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| EIA Methodology | Many of the topic chapters do not clearly define the study areas for the scoping exercise or the EIA and do not justify the choice of the study area. The ES should clearly define and justify the study areas and illustrate them where possible, for example on a figure.  | * In Chapter 7 (Terrestrial and Freshwater Biodiversity), the desk study area is defined as extending 200km from the site to include marine statutory biodiversity sites with ornithological interest, however, Table 7.4 (terrestrial and freshwater biodiversity baseline) does not include the Carmarthen Bay SPA and Burry Inlet SPA and Ramsar site which are within the study area.
* In Chapter 8 (Marine Biodiversity) relevant SACs, SPAs and Ramsar sites have not been identified in the study area and no justification for this is given. In addition to this, the River Usk, River Twyi, Carmarthen Bay & Estuaries, Cleddau Rivers and Pembrokeshire Marine SACs are omitted from the discussion of designated sites and it is not clear if they are within the study area.
* In Chapter 11 (Soil, Geology and Hydrology) paragraphs 11.3.2 and 11.3.3 clearly define the study areas for soils and geological features (100m) and for land contamination receptors (1km), however, a study area for hydrogeology is not clearly set out.
* In Chapter 12 (Historic Environment) the study area in 12.3.2 is stated as 5km for designated heritage assets, no study area has been given for non-designated heritage assets or a historic landscape assessment.
* In Chapter 16 (Socio-economics) three levels of study area are defined – local, regional and national. There is no justification for electing for three different study areas. For example, it could be suggested that different types of effect could be felt at different spatial scales. It could also be clarified that information on the national scale is only likely to be used for context.
* In Chapter 18 (Conventional Waste) one study area is defined for the EIA. The ‘IEMA guide to: Materials and Waste in Environmental Impact Assessment (2020) / the Design Manual for Roads and bridges, LA110 Material assets and waste (2019)’ defines two study areas – one is the area of which the waste will be generated (typically a red line boundary), the second is an area sufficient to make an assessment of capacity and availability of infrastructure to handle the waste; typically a county and/or region.  Using one study area may not be sufficient to make an adequate assessment.
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| EIA Methodology | Within the topic chapters, there is inconsistency when determining the significance of effects. An overarching significance matrix is provided in Table 4.3 of the scoping report, however in some of the topic chapters there is no reference to this matrix or methodology for how significant effects will be determined. Whilst it is appropriate for the matrix to be adapted for each topic area, there should be consistency in the information provided. | * In some instances in the topic chapters, there is no reference to a matrix or how a significant effect is determined, or the matrix does not demonstrate the level of significance e.g. major, moderate or minor.
* In Chapter 5 (Air Quality) paragraph 5.5.20 sets out the methodology to determine significance for dust emissions. Stage 1 of the process is clear, however stages 2 and 3 are not, including what is considered as a significant effect. In paragraph 5.5.25, impact from road traffic emissions is set out, however what is considered as a significant effect is not stated. In addition, there are omissions regarding how significance will be determined with respect to the impacts on human health receptors (long and short-term impacts) and nature conservation sites.
* In Chapter 7 (Terrestrial and Freshwater Biodiversity), within section 7.5, the scale of the value or sensitivity of receptors has not been defined. A sensitivity value (high, medium, low) has not been clearly concluded and definitions of the scale should have been provided in Section 7.5.
* In Chapter 9 (Coastal Management and Water Quality), the proposed methodology does not consider the importance or value of a receptor, only it’s capacity to recover from a hypothetical impact (sensitivity). Paragraph 9.5.12 states that assessment of significance of impacts on coastal management will be based on expert judgement and refers to consultation with bodies responsible for implementing the SMP. It is also unclear whether expert judgement is also the basis for assessing significance with respect to water quality and coastal processes. In addition, paragraph 9.5.13 states that beneficial effects could occur, however does not define what would constitute as a significant beneficial effect.
* In Chapter 15 (Traffic and Transport), it is unclear what is defined as a significant effect for severance, driver delay, pedestrian delay, pedestrian amenity, fear and intimidation, and accidents and safety. In addition to this, information on the maximum predicted weekly movements, rather than an average, will be important in assessing the potential impacts on receptors.
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| EIA Methodology | In some instances, within the topic chapters, the EIA methodology does not provide sufficient information to justify the approach adopted. | * In Chapter 8 (Marine Biodiversity) paragraph 8.5.10 refers to the importance of ecological features and how this will be categorised. The text suggests that only ‘important’ ecological features will be considered for potential significant effect. Receptors cannot be ruled out of the assessment based on their ‘importance’. All marine receptors potentially affected by the project (regardless of their ‘importance’) must be included for assessment. In addition, it is not clear how the geographic context of the importance is being used for the assessment, or how the ‘importance’ is considered in terms of significance of effects or receptor sensitivity.
* In Chapter 5 (Air Quality), paragraph 5.6.13 on the effects of pollutant emissions from NRMM refers to a *‘long duration’* and a distance of *‘20m to residential properties’*. A definition of what is meant by a long duration and why the distance is relevant as this spatial extent is not discussed in the assessment methodology section and should be provided in the ES.
* In Chapter 12 (Historic Environment) the significance criteria used does not reflect the qualitive assessment required to establish the significance of a heritage asset. For example, Grade I listed buildings are demonstrably more significant than Grade II listed buildings. No reference is made to regional research frameworks for assessing the relative significance of archaeological assets and the potential significance of unknown remains.
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| Future Baseline | There is a general lack of information on the future baseline across all the topic areas, and therefore there is uncertainty as to what future baseline has been used in the scoping exercise and is to be used in the EIA. A consistent approach to defining and describing the future baseline should be applied to the ES. | * The majority (but not all) of the chapters conclude that long-term changes in the baseline cannot be predicted and therefore the current baseline will be used for the assessment. It is unclear if this was for the scoping exercise or if it is the approach for the EIA. There is insufficient justification to explain why this is an acceptable approach and limitations to defining the future baseline and methods of managing this have not been set out.
* Most topics have included a ‘without scheme’ scenario (e.g. Air Quality), however some topics such as Climate Change have stated the ‘without scheme’ scenario is unrealistic as it is Government Policy to decommission the site. A consistent approach should be applied to the assessment, and if it differs, a justification should be provided in the ES.
* Within the future baseline section of topic chapters, HPA and HPC have been included in some instances and have not in others; a consistent approach has not been followed. In Appendix 4A, HPC has been included as a project for consideration in the cumulative impact assessment. It will be important not to double-count the assessment in the EIA, with clear boundaries established between cumulative and future baseline.
* There is limited information on who is responsible for the decommissioning of the 400kv substation and when this will be undertaken and if this is to be considered as future baseline or within the cumulative impact assessment.
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| Uncertainty | As expected at the scoping stage, there is a level of uncertainty and limitations to the assessment. The scoping exercise is based on initial baseline data and limited project information. Uncertainties and limitations encountered during the scoping exercise have not been clearly documented, nor has an approach to be used to address or manage these in the EIA been set out. | * Paragraphs 4.3.1 to 4.3.4 are well written and set out good practice and industry standard for the EIA scoping exercise. It would have been useful in this section to acknowledge that the information available at a scoping stage is limited and to manage this limitation and uncertainty, assumptions are made using for example a realistic worst case. Through the EIA process, as information becomes available the scope may be further refined.
* There may be uncertainty over activities in the later stages of decommissioning, therefore it may not be possible to be definitive. The ES should therefore cover the strategic intention for eventual completion of decommissioning. Details should be given on the range of options being considered for future activities. Where there is uncertainty in the later stages, this should be indicated in the ES, with details on how the EIA approached the uncertainty.
* The Scoping Report (Section 4.8 or within each topic chapter) does not detail how uncertainty or limitations have been managed in the scoping exercise or will be managed through the EIA. Having uncertainty is acceptable, it is how it is dealt with that is important to address.
* There will be a number of uncertainties and limitations around the development and assessment of the future baseline as well as the assessment of future phases. The ES should document all limitations encountered and how they were managed. For example, it may be that further future baseline data is collected through the lifetime of the project, or reviewed against climate data as it is updated, and further assessment undertaken at specific points in the programme. The Scoping Report sets out the possibility of interim reviews, however an approach on how this will be undertaken and reported in the ES has not been included.
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| Decommissioning Project Scope | There is uncertainty across the Scoping Report on what is considered as the project scope and thus to be included in the EIA.  | * In section 2.3, there is uncertainty on when the current operational phase (defueling) ends, and the Preparations for Quiescence Phase commences; it may be that the phases overlap but there are discrete activities of the two.
* There is no mention of associated development that may be required to support the decommissioning of the site, for example if the access road is suitable for the duration of the project (e.g. considering climate change) and whether additional facilities are required for example to accommodate the work force (mentioned in Table 3.1 but nowhere else).
* Paragraph 2.3.34 lists out additional enabling projects that have not been included in Table 3.1. There is uncertainty as to whether these are included in the EIA and considered in the scoping exercise.
* The Scoping Report states that the OWPF and WMC will require planning permission through the TCPA, however this is less clear for the DWPF. It is unclear if these works are also included in the scope of EIADR.
* The Scoping Report provides information on the OWPF and DWPF that may be required on site but refers to an option for utilising existing Hinkley Point A waste management facilities. During ONR’s consultation with stakeholders it was noted that EDFE should provide further clarity on this point in the ES and consider whether existing facilities on the adjacent Hinkley Point A site could be used to support decommissioning activities. Any use of the A site’s facilities would need to be in agreement with the licensee and the regulators.
* It would be useful for the Scoping Report to include confirmation that HPA has sufficient capacity to accept ILW for storage as this will provide further clarity on the interactions between the two sites and the spatial scope of EIADR.
* A Marine Licence including the removal of the intake and outfall structure are likely to be required. It is unclear how additional requirements under Marine Licensing will be managed where EIADR also applies.
* In Table 8.7, the cessation of operation of the cooling water system has been considered, clarity should be provided on when this activity will take place i.e. is it part of defueling or part of the decommissioning project?
* In Table 8.8 there is reference to the construction of new active effluent discharge outfall. This activity has not been mentioned previously nor in other chapters, such as Chapter 9: Coastal Management and Water Quality which should consider changes to water quality.
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| Baseline  | The Scoping Report is based on a certain level of baseline information, and it is recognised that further baseline data is to be collected during the EIA process. | * In Chapter 5 (Air Quality), it is unclear which types of human health receptors have been considered. As human receptors have not been defined, there is uncertainty as to whether other sensitive human receptors have been considered other than residential properties.
* In Chapter 12 (Historic Environment) paragraph 12.3.4 states that the online HER has been consulted. The online version of this resource will not provide sufficient information to allow for the assessment of historic environment constraints, and therefore provide a proportionate assessment. In addition, the online HER cannot be used for commercial purposes. There is a risk that additional assets may be identified (that have not been considered in the scoping exercise) and therefore will have to be considered in the EIA leading to a disproportionate assessment.
* In Chapter 12 (Historic Environment), there is limited information provided on the outline of the archaeological and historic development of the area and there is no clear assessment of archaeological potential both terrestrial and marine. There is no discussion of the geology of the study area or geoarchaeological potential, which is fundamental given the location of the works on the edge of the Bristol Channel and within the marine environment. There is no discussion on HPC and HPA which form part of the baseline. There is no identification of non-designated heritage assets other than HPB. HPB is assessed as an entity rather than understanding which elements of the site contribute to the significance of the heritage asset.
* In Chapter 8 (Marine Biodiversity) there is an absence of what activities occur in the marine environment that also form part of the baseline, e.g. commercial fishing, shipping, dredging. This should be considered in the EIA. In addition, the Scoping Report does not set out an existing baseline of potential noise sources in the marine environment, so the requirement of baseline noise surveys and type cannot be determined if acceptable.
* In Chapter 9 (Coastal Management and Water Quality), the current baseline has been described although there is no mention of baseline hydrodynamics (e.g. tidal range, tidal velocities, wave climate), which will be required to assess impacts on coastal processes and subsequent coastal management. Sediment size information will also be required as well as information on any contaminants that may be present within the seabed. How the hydrodynamic baseline is to be defined with respect to the cooling water outfall operates altering should be included.
* In Chapter 10 (Surface Water and Flood Risk) paragraph 10.3.28 states that there are no designated water dependent conservation sites within the Study Area. The RAMSAR, SSSI and SPA are within the study area, so understanding how these are not water dependent should be provided. The consideration of whether terrestrial and freshwater habitats depend on the surface water should also be considered.
* Paragraph 10.3.14 states that the drainage system receives the cooling water discharge and paragraph 13.3.17 states this is discharged to the Severn Estuary. It should be confirmed if this source (and the others) and discharge will be considered as existing baseline in the EIA as site operations are altering.
* In Section 3.1.4 there is no mention of night-time lighting. The ‘Preparations for Quiescence Phase’ description (paragraph 2.3.7) states that ‘site *security lighting during this phase will remain largely as it has been in operation. The working hours make it likely that some site lighting may be required to undertake work safely in winter’*, the lighting would therefore reduce during the Quiescence Phase and likely reduce adverse effects and improve the landscape and visual amenity. This should be considered in the EIA.
* There seems to be a lack of baseline for any existing vibration sources. It is acknowledged that ecological receptors that could be significantly affected by noise emissions are excluded from the noise and vibration chapter. The chapter however does not provide sufficient evidence of potential offshore noise emitting activities (baseline) that can be used in the biodiversity assessments (marine and bird assessments).
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| Proposed EIA Scope | In some of the topic chapters, the scoping report appears to have not considered certain receptors and potential environmental impacts of the decommissioning project. There is therefore a risk that the scope is either too wide or that some effects or receptors have been scoped out too soon.  | * In Chapter 5 (Air Quality), Table 5.13 ‘Location and description of representative designated ecological receptors’ does not provide a comprehensive list of sites and it is unclear if this will be expanded for the EIA.
* In Chapter 15 (Traffic and Transport) the scoping exercise does not consider potential impacts as a result of increased traffic on the highway to biodiversity receptors, for example, acid and nitrogen deposition should have been considered in the scoping exercise. Transport routes (including the access route) are not in the red line boundary however will be considered in the traffic and transport assessment.
* Chapter 7 (Terrestrial and Freshwater Biodiversity) covers impacts on birds, however, in table 7.8, activities that could affect the marine environment and thus have an indirect effect to birds have not been considered. For example, underwater noise effects, and changes to water quality such as contamination from the disturbance of sediments, which could lead to impacts to fish populations. Sufficient evidence to support the scoping exercise has not been provided at this stage.
* In Chapter 8 (Marine Biodiversity) the proposed scope in Table 8.8 seems to be high level; the receptors that could be significantly affected are grouped as ‘marine habitats and species’. A list of potential marine ecological receptors that could be affected are set out in Table 8.7 but it is unclear which receptors could be significantly affected and thus to be taken forward for further assessment.
* Chapter 9 (Coastal Management and Water Quality) effects on the water quality of aquatic receptors associated with accidental spillages of fuels and oils from the Works Area have been scoped out given that good practice for pollution prevention will continue to be successfully implemented onsite. It would be useful for further information on the arrangements for mitigating accidental releases to the environment and minimising environmental impacts to be included in the ES.
* In addition, Chapter 9 does not consider the potential impacts on the Porlock Bay Oysters oyster farm which has been impacted by an accidental spill of oil from the site in the past.
* In Chapter 12 (Historic Environment) designated heritage assets (paragraph 12.6.7) appear to be scoped in based on proximity to the works area only. Further information should be required on how their setting contributes to their significance and how this significance may be impacted by the works. Similarly, there is no clear rational as to why other designated heritage assets have been scoped out as no discussion around their setting has happened in the chapter.
* In Chapter 12 (Historic Environment) the scoping out of unknown buried archaeological features assumed to have been damaged by construction of HPB requires further definition. For example, does this scope out all archaeological assessment within the Works Area, or just the archaeology affected by the construction of HPB? The ES should include further information to ensure the assessment scope is robust and proportionate.
* In Chapter 14 (Noise and Vibration) the receptors listed in Table 14.10 seem to be restricted to dwellings. There is insufficient evidence to demonstrate why these receptors have been scoped in and why others such as hospitals, schools and public amenity areas have not been considered.
* In Chapter 13 (Landscape and Visual), a viewpoint from the AONB has not been considered and therefore there is insufficient evidence to determine if scoping this receptor out of the EIA is suitable. The EIA should reconsider effects on this receptor. In addition to this, the scoping report has not considered view points from close to the station.
* Chapter 19 (Radioactive Waste and Discharges) states that the impact of ILW on interim storage facilities has been scoped out of the assessment (19.6.9). Given that there are uncertainties associated with the strategic assumption that HPB ILW can be stored in the HPA Interim Storage Facility, this impact may have been scoped out prematurely.
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1. CM9 revision to be identified upon completion of activity and incorporation of any changes to document. [↑](#footnote-ref-1)
2. Where required in accordance with NS-PER-GD-016. [↑](#footnote-ref-2)
3. Hard-copy of document signed-off, CM9 version updated with authors / approver / acceptor names and dates and record finalised [↑](#footnote-ref-3)