

Health & Safety Executive

Nuclear Directorate

Guidance on the Nuclear Reactors (Environmental Impact Assessment for Decommissioning) Regulations

Contents

Abbreviations		3
Introduction		4
Regulation 1	Citation and commencement	7
Regulation 2	Definitions	7
Regulation 3	Application	10
Regulation 4	Consent for dismantling or decommissioning	11
Regulation 5	Provision of an environmental statement	11
Regulation 6	Pre-application opinion as to the content of the environmental statement	18
Regulation 7	Provision of information to licensee	19
Regulation 8	Procedure by the Executive	20
Regulation 9	Publicity	23
Regulation 10	Further information and evidence respecting environmental statements	24
Regulation 11	Information as to decisions	26
Regulation 12	Projects likely to have significant effects on the environment of another EEA State	27
Regulation 13	Change or extension of project	29
Regulation 14	Limitation on disclosure	33
Regulation 15	Recovery of expenses by the Executive	33
Regulation 16	Enforcement	34
Schedule 1	Information to be included in an environmental statement	35
Schedule 2	Criteria for determining further assessment	36
Appendix 1	EIADR: Application for consent to decommission and subsequent actions	38
Appendix 2	Interfaces	39
Appendix 3	Screening for changes or extensions to the decommissioning of nuclear reactors: Procedures flow-chart	43
Appendix 4	Procedures for screening changes or extensions to the decommissioning of nuclear reactors	44
Appendix 5	Proforma for finding of no significant effects (FONSE) report	53
References		54

Abbreviations

ALARP	As Low As Reasonably Practicable
EEA	European Economic Area
EIA	Environmental Impact Assessment
EIADR	Environmental Impact Assessment for Decommissioning Regulations
FONSE	Finding of No Significant Effect
HSE	Health and Safety Executive
ILSAE	Indicator of Likely Significant Adverse Effects
INSAE	Indicator of No Significant Adverse Effects
ISAE	Indicator of Significant Adverse Effects
LCLC	Local Community Liaison Council
NDA	Nuclear Decommissioning Authority
NGO	Non-Governmental Organisation
PAO	Pre-Application Opinion
SSG	Site Stakeholder Group

Introduction

This document provides guidance on compliance with the Nuclear Reactors (Environmental Impact Assessment for Decommissioning) Regulations 1999 (EIADR99), as amended by the Nuclear Reactors (Environmental Impact Assessment for Decommissioning) (Amendment) Regulations 2006 (EIADR06). The competent authority for EIADR¹ in Great Britain is the Health and Safety Executive (HSE).

The document is intended to be of use to nuclear site licensees², statutory consultation bodies, other organisations and members of the public who have an interest in the environmental impact of the decommissioning of nuclear reactors.

The regulations have been reproduced in the same sequential order that can be found in EIADR, followed by an explanation and advice on compliance and HSE procedures.

Additionally, there are five appendices:

- Appendix 1 is a flow chart showing the EIADR process;
- Appendix 2 provides an explanation of the interfaces with other legislation and Government policy;
- Appendix 3 is a flow chart demonstrating the screening process for changes or extensions which may have a significant adverse effect on the environment;
- Appendix 4 provides a tool for screening changes or extensions to the decommissioning project; and,
- Appendix 5 is a proforma for recording results of negative screening, when the licensee has determined that the change or extension to the decommissioning project will not result in significant adverse effects on the environment.

Further advice may be obtained from the Health and Safety Executive's Nuclear Safety Directorate (EIA Team, Redgrave Court, Merton Road, Bootle, Merseyside, L20 7HS; tel 0151 951 3571; fax 0151 951 4163; email eia.team@hse.gsi.gov.uk).

Background to the regulations

European Council Directive 85/337/EEC [1], as amended by Council Directive 97/11/EC [2] and Council Directive 2003/35/EC [3], sets out a framework on the assessment of the effects of certain public and private projects on the environment and on public participation in respect of the drawing up of certain plans and projects relating to the environment. It is known as the Environmental Impact Assessment (EIA) Directive.

¹ EIADR - Nuclear Reactors (Environmental Impact Assessment for Decommissioning) Regulations 1999 as amended by the Nuclear Reactors (Environmental Impact Assessment for Decommissioning) (Amendment) Regulations 2006. This term is used generally in the text of this report.

² Nuclear Site Licensee is a corporate body that has been granted a site licence under the Nuclear Installations Act 1965 (as amended).

The EIA Directive is implemented in Great Britain for decommissioning nuclear reactor projects by the Nuclear Reactors (Environmental Impact Assessment for Decommissioning) Regulations 1999 (EIADR99) [4] as amended by the Nuclear Reactors (Environmental Impact Assessment for Decommissioning) (Amendment) Regulations 2006 (EIADR06) [5].

Purpose of EIADR

The purpose of EIADR is to require assessment of the potential environmental impacts of projects to decommission nuclear power stations and nuclear reactors (except research installations whose maximum power does not exceed 1 kilowatt continuous thermal load). In addition, the intention is to make the decision making process open and transparent (an aim supported by the Nuclear Decommissioning Authority (NDA)). EIADR require that the public and other relevant stakeholders be consulted from an early stage, regarding the environmental impacts of the options being considered for a proposed decommissioning project.

Application of the EIADR

The regulations apply to all decommissioning projects that began after they came into force on 19 November 1999, and to existing decommissioning projects (those that commenced prior to 19 November 1999) that are subject to a change or extension, which may have significant adverse effects on the environment. In cases where a project is subject to such a change, the licensee must apply to HSE for a determination as to whether an environmental impact assessment (EIA) is required and if so, the regulations apply, as for a new project.

EIADR apply to decommissioning and dismantling of nuclear power stations or other nuclear reactors, including the reactors, plant associated with power production and removal of related wastes, and buildings and land contaminated as a result of the operation of the reactor. The regulations also apply to projects serving national defence purposes unless the Secretary of State is of the opinion that application of these Regulations would have an adverse effect on the defence purposes of the project.

When the removal of waste from, or decontamination work on, a power station or reactor is carried out as part of routine operations not intended to be part of final dismantling or decommissioning, then these activities are not subject to EIADR (examples of such work are given under regulation 2). Also, when the removal of fuel elements, neutron absorber cartridges or control rods are carried out in accordance with normal operating procedures, these activities are not subject to EIADR.

EIADR Process

The flow chart in Appendix 1 summarises the EIADR process. Under the regulations, any licensee wishing to begin to decommission or dismantle a nuclear power station, or other nuclear reactor, must apply to HSE for consent to carry out a decommissioning project, undertake an EIA and prepare an environmental statement that reports on the environmental impact assessment of the project. If HSE considers

that additional information is required to enable it to make a decision, such information will be requested and must be supplied by the licensee. When planning to undertake an EIA, there is an optional stage where the licensee may request from HSE an opinion on what the environmental statement should contain (called a pre-application opinion or PAO). In such a case, the licensee must provide information (usually in the form of a scoping report) to inform the opinion.

HSE must take into account the views of the consultation bodies identified in EIADR, both when formulating its PAO on what the environmental statement should contain and when deciding whether or not to grant consent.

Additionally, HSE will consult with a range of other organisations and individuals that have expertise, knowledge or interest in nuclear, planning and environmental matters, and include: government departments; the devolved administrations; agencies and bodies; non-governmental organisations (NGOs); and local groups (such as the Site Stakeholder Group (SSG), Local Community Liaison Council (LCLC) and local interest groups).

The regulations include provision for cases when a proposed decommissioning project is likely to have significant effects on the environment of another European Economic Area (EEA) State. In such a case, the State must be informed and consulted on likely environmental impacts of the project and the results of this consultation must be taken into account by HSE when deciding whether or not to grant consent.

EIADR provides HSE with the power to attach conditions to any consent it grants, as may appear to it to be necessary or desirable in the interests of limiting the impact of that project on the environment. Such conditions may require for example, the licensee to prepare and implement an environmental management plan. Such a plan identifies mitigation measures, describes the implementation and effectiveness of mitigation measures, and describes changes to mitigation measures and reasons for changes in light of experience. In such circumstances a copy of the environmental management plan and its subsequent revisions must be sent to HSE and made available to the public. HSE must also be notified in advance of any proposed significant changes to the mitigation measures in the plan. The purpose of this is to aid transparency associated with the project and give stakeholders confidence that the licensee is taking a responsible attitude. EIADR also provide HSE with powers under Health and Safety at Work (etc) Act 1974 [6] to effectively enforce such conditions.

At the end of an application process, when HSE has made its decision on whether or not to grant a consent for the decommissioning project, HSE informs the licensee and the Secretary of State of the decision; informs the public by publishing a notice in a local newspaper; and makes available a statement (a report) for public inspection. In addition, HSE posts details of the decision on its web site (<http://www.hse.gov.uk/nuclear>).

Citation and commencement

Regulation

1. These Regulations may be cited as the Nuclear Reactors (Environmental Impact Assessment for Decommissioning) Regulations 1999 and shall come into force on 19th November 1999.

Definitions

Regulation

- 2. - (1) In these Regulations unless the context otherwise requires –*
“any particular person” includes any non-governmental organisation promoting environmental protection;
“the consultation bodies” means –
(a) the local planning authority;
(b) the local highway authority;
(c) any principal council for the area in which the site where the project is to be carried out, if not the local planning authority;
and such of the following bodies as are applicable having regard to the place where a project is to be carried out -
(d) in England and Wales, the Environment Agency;
(e) in England, the Countryside Commission and the Nature Conservancy Council for England;
(f) in Wales, the Countryside Council for Wales;
(g) in Scotland, Scottish Natural Heritage and the Scottish Environment Protection Agency;

“the Directive” means Council Directive 85/337/EEC¹ on the assessment of the effects of certain public and private projects on the environment, as amended by Council Directive 97/11/EEC²;

“EEA State” means a State party to the Agreement on the European Economic Area³;

“environmental impact assessment” means a process which identifies, describes and assesses in an appropriate manner, in the light of each individual case, the direct and indirect effects of a proposed project on -
(a) human beings, flora and fauna;
(b) soil, water, air, climate and the landscape;
(c) material assets and the cultural heritage;
(d) the interaction between the factors referred to in sub-paragraphs (a) to (c) above;

¹ O.J. No. L 175, 5.7.1985, p.40

² O.J. No. L 73, 14.3.1997, p.5

³ Cm. 2073. The Agreement was signed in May 1992 and adjusted by a protocol signed at Brussels on 17th March 1993. The agreement came into force on 1 January 1994.

"the Executive" means the Health and Safety Executive⁴;

"licensee" means a person to whom a nuclear site licence has been granted under the Nuclear Installations Act 1965⁵ whether or not that licence remains in force;

"local planning authority" means, in England and Wales a local planning authority within the meaning of Part I of the Town and Country Planning Act 1990⁶ and in Scotland, a planning authority within the meaning of Part I of the Town and Country Planning (Scotland) Act 1997⁷;

"project" means the carrying out of any dismantling or decommissioning work on any nuclear power station or nuclear reactor to which these Regulations apply by virtue of regulation 3(1), but it does not include -
(a) the removal from a power station or reactor of fuel elements, neutron absorption cartridges or control rods carried out in accordance with normal operating procedures; or
(b) the removal of waste from, or decontamination work on, a power station or reactor when such an activity is carried out as part of routine operations not intended to be part of final dismantling or decontamination of that station or reactor;

and for the purposes of this definition dismantling or decommissioning of a nuclear power station or nuclear reactor shall not be treated as having commenced unless plant or equipment is disabled or removed for the purpose of permanently preventing the continued operation of that station or reactor.

Guidance

1. At the time of going to press, the consultation bodies are:
 - the local planning authority and principal council (if different from the local planning authority);
 - the local highway authority;
 - in England, Natural England and the Environment Agency;
 - in Scotland, the Scottish Environment Protection Agency and Scottish Natural Heritage; and
 - in Wales, the Countryside Council for Wales and the Environment Agency
2. If any of the consultation bodies are subject to change of name or re-organisation, the organisation taking on the role that is currently carried out by the body listed in Regulation 2, will become the consultation body.

⁴ The Health and Safety Executive was established by section 10 of the Health and Safety at Work etc. Act 1974 (c. 37), as amended by the Employment Protection Act 1975 (c. 71), section 116 and Schedule 15, paragraph 3

⁵ 1965 c. 57; as amended by S.I. 1974/2056 and S.I. 1990/1918

⁶ 1990 c. 8.

⁷ 1997 c. 8.

3. Local planning is usually the responsibility of a locally elected authority. There are different systems of local government across Great Britain, consisting of one or more tiers of the following:
 - county councils (responsible in shire areas for countywide, or strategic, planning and transport);
 - district councils (responsible for local planning matters, including planning applications, except for minerals extraction and waste disposal);
 - national park authorities (which have local planning powers for national parks);
 - metropolitan councils (which have a single tier function for strategic and local planning for larger conurbations and cities);
 - unitary councils in the former shire areas. These work with adjoining county councils to prepare a joint structure plan as well as prepare their own local plan;
 - Wales has a wholly unitary system of local government with a number of councils each having planning functions similar to those of metropolitan councils in England. There are also 3 national park authorities;
 - Scotland has a number of unitary local authorities, each of which has full planning powers for its area. However, there is some overlap between authorities for wider planning issues;
 - in some places in Great Britain, parish or town councils provide an informal 'third tier' of local government. They do not prepare development plans or decide planning applications but have an opportunity to comment on them to the district council.

Further advice can be obtained from the Royal Town Planning Institute (at <http://www.rtpi.org.uk>). When there is some doubt regarding which tier of local authority provides the planning function, HSE will consult all relevant levels.

4. An "EEA state" means a country that has signed-up to the Agreement on the European Economic Area. The EEA consists of the European Union member states plus Norway, Iceland and Liechtenstein.
5. Where the removal of fuel elements, neutron absorber cartridges or control rods utilises a novel approach (because work is being carried out as part of a decommissioning project), with significant new plant and equipment installed, resulting in new operating procedures, then EIADR apply to the work.
6. When the removal of waste from, or decontamination work on, a power station or reactor is carried out as part of routine operations, not intended to be part of final dismantling or decommissioning, then these activities are not subject to EIADR. For example, if waste originates from routine operations, such as laundry effluent, soiled personal protective equipment, gas or other coolant, then this may proceed before consent to begin the decommissioning project is granted. Similarly, emptying vaults of operational waste is not subject to EIADR, if the work was already in progress before the cessation of operation.

Regulation

- 2 (2) *Unless the context otherwise requires, any reference in these Regulations to –*
- (a) a numbered regulation or Schedule is a reference to the regulation or Schedule in these Regulations so numbered; and*
 - (b) a numbered paragraph is a reference to the paragraph so numbered in the regulation or Schedule in which the reference appears.*

Application

Regulation

3. - (1) *These Regulations shall apply to nuclear power stations and other nuclear reactors (except research installations for the production and conversion of fissionable and fertile materials, whose maximum power does not exceed 1 kilowatt continuous thermal load).*

Guidance

7. EIADR apply to decommissioning and dismantling of nuclear power stations, including the reactors, plant associated with power production and removal of related wastes, and buildings and land contaminated as a result of the operation of the power reactor. In the case of other reactors (whose maximum power exceeds 1 kilowatt), which are not used in the production of power, EIADR apply only to the decommissioning and dismantling of the reactor, including the remediation of buildings and land contaminated as a result of the reactor operation e.g. such as reactor hall and cooling plant.

Regulation

3 (2) *Without prejudice to paragraph (1), save for the purpose of regulation 13 these Regulations shall not apply to the carrying out of dismantling or decommissioning work on a nuclear power station or nuclear reactor commenced prior to the coming into force of these Regulations.*

3 (3) *These Regulations shall not apply to any project serving national defence purposes where the Secretary of State is of the opinion that application of these Regulations would have an adverse effect on the defence purposes of the project.*

Guidance

8. For the purpose of these regulations, plant and sites that are currently owned by, or operated on behalf of, the Ministry of Defence, are considered to be projects serving national defence purposes. EIADR apply to projects serving national defence purposes unless the Secretary of State is of the opinion that application of these Regulations would have an adverse effect on the defence purposes of the project and then he may grant an exemption for the individual project.

Consent for dismantling or decommissioning

Regulation

4. *A licensee shall not commence a project unless -*
- (a) he has applied to the Executive for a consent to carry out the project; and*
 - (b) a consent to carry out the project has been granted for the purposes of this paragraph by the Executive.*

Guidance

9. Compliance with the Health and Safety at Work (etc) Act 1974 [6] and the Nuclear Installations Act 1965 (as amended) [7] requires the licensee to control nuclear and other hazards in a way that ensures that the risk is reduced so far as reasonably practicable (or is as low as reasonably practicable, ALARP) at all times. There may be some limited instances where delaying non-routine waste removal or decontamination, until consent is granted, would result in additional risks to health, safety or the environment. In such cases, the licensee shall consult with HSE before commencing such work, to decide whether the work can proceed before consent under EIADR is granted. If undertaken, work must be carried out in compliance with relevant health and safety, nuclear safety and environmental protection legislation, or other relevant legislation and will be limited to that necessary to remediate the specific hazard.

Provision of an environmental statement

Regulation

5. - (1) *A licensee who applies for a consent under regulation 4(a) shall provide to the Executive an environmental statement, being a statement which –*
- (a) includes such of the information referred to in Part I of Schedule 1 as is reasonably required to assess the environmental effects of the proposed project and which the licensee can, having regard in particular to current knowledge and methods of assessment, reasonably be required to compile; and*
 - (b) includes at least the information specified in Part II of Schedule 1.*

- 5 (2) *The information referred to in paragraph (1) shall be provided to the extent that the information is relevant to –*
- (a) the consent procedure; and*
 - (b) the specific characteristics of a particular project or type of project and of the environmental features likely to be affected.*

Guidance

10. The environmental statement forms the written report of the environmental impact assessment (EIA) carried out by the licensee. The EIA assesses the potential effects of the proposed decommissioning project on the environment, and identifies the mitigation measures required to prevent, reduce and where

possible offset any significant adverse effects. The environmental statement must provide information as detailed in Part I Schedule 1 as is reasonably required to assess the environmental effects of the proposed project. Further, more detailed guidance on carrying out environmental impact assessments and preparing environmental statements is provided elsewhere [8,9,10,11,12].

11. The licensee is responsible for providing the environmental statement, which must be submitted in relation to the application for consent to commence the decommissioning project. However, the licensee may choose to engage consultants for some or all of the work to ensure that a sufficiently robust assessment is undertaken.

General content of the environmental statement

12. The statement must provide a clear picture of the project as required by EIADR and include at least the information specified in Part II of Schedule 1. This includes a description of the physical characteristics of the project together with an outline of the main alternatives (or options) considered by the licensee, describing the environmental effects of each option. Regulation 14 provides a limit on disclosure, so that the licensee is not required to disclose information which is capable of being treated as confidential or must be so under regulations 12 and 13 of the Environmental Information Regulations 2004 [13] or regulation 10 and 11 of the Environmental Information (Scotland) Regulations 2004 [14]. Further guidance on regulation 14 is given in paragraph 70.
13. The whole project includes dismantling and site clearance. While it may not be possible, at the time when consent is requested, to be definitive about the later stages of decommissioning, the statement should cover the strategic intention for eventual completion of decommissioning. Details should be given of the range of options being considered, describing the environmental effects of each option. Where there is uncertainty in later stages, this must be indicated. HSE acknowledges that the length of the decommissioning project (possibly many decades) means that the amount of detail which can reasonably be provided by the licensee regarding site clearance and dismantling may be limited. Schedule 1 of the regulations takes this into account. Should circumstances change during the period of decommissioning and result in the need for a change or extension to the project, which may have significant adverse environmental effects, then the licensee must apply (as per the requirements of regulation 13) to HSE for a determination as to whether the project should be made subject to an EIA. If so, the licensee would be required to apply for consent to carry out that change to the decommissioning project, and prepare an environmental statement for public consultation under EIADR. Further guidance on changes and extensions to projects is given in paragraphs 56 to 69.
14. The environmental statement should cover all the likely effects on the environment: direct, indirect, secondary, cumulative, short, medium and long term, permanent and temporary, and positive and negative effects. Any technical deficiencies or lack of know-how encountered in compiling the information should be made clear within the statement. The consideration of the cumulative nature of effects should include assessment of the added impact of the decommissioning project to existing developments of works, even when unrelated

to the project. In addition, the cumulative effects on the environment from different aspects of the project must be assessed and clearly described within the statement. For example, if a large construction project (unrelated to the decommissioning project) is planned on or close to the licensed site during the period of decommissioning, the EIA should take this into account when considering the environmental effects of the decommissioning project. Consideration of potential positive and negative effects of the project should be given equal emphasis in the assessment [9].

15. The statement must address, amongst other things, accidental or untoward events and the nature and potential for adverse environmental effects arising from these, and reasonably foreseeable abnormal situations during the whole decommissioning period. Once again, HSE recognises the possible limitations of such considerations for the later stages of projects and the guidance of paragraph 13 should be taken into account.
16. The environmental statement must describe measures envisaged to avoid, reduce and, if possible, remediate significant adverse effects on the environment. (Note; HSE may attach conditions to the consent (if granted), which may require the licensee to implement an environmental management plan. Further guidance on environmental management plans is given in paragraph 45).
17. The environmental statement must include a non-technical summary of the information provided. The non-technical summary provided by the licensee must be in a form that is easily understood by non-experts, although supporting material should also be made available. This will enable the reader (expert or non-expert) to understand the conclusions in the environment statement and form their own judgements on the significance of the environmental issues raised by the project.

Baseline Description

18. The environmental statement should include a baseline description, that is the state of the environment as it exists before the decommissioning project begins, for example non-radioactive and radioactive land contamination. If the baseline is not static this should be reflected. The environmental statement must include sufficient detail to provide a basis for the assessment of impacts arising from the decommissioning project [10]. Existing data should be used where these are available and known to be accurate and the competent authorities and organisations in the affected area should be consulted to obtain such data. When data obtained a number of years ago are used, the environmental statement should provide sufficient justification that it is still relevant.
19. Where data from surveys are used as part of a baseline description, care must be taken to ensure that the surveys were carried out at optimal times of day, week or year, for the aspect of the environment being assessed. Further detailed guidance on baseline description is given in chapter 5 of the European Commission guidance [10].

Interface with policies and other legislation

20. As noted above, the environmental statement needs to be comprehensive. However, HSE recognises that some issues relevant to the environmental statement will be adequately covered elsewhere, in particular: town and country planning matters; compliance with security, health, safety and environment legislation; decommissioning timetables relating to Government policy; and international legislation where appropriate.
21. Rather than repeating this work, an environmental statement can provide links with these issues, and sufficient information to put them into context with the decommissioning project. An environmental statement should describe related town and country planning legislation and provide adequate (but not necessarily detailed) information on developments covered by that legislation. A statement should describe main related security, health, safety and environment legislation and provide adequate (but not necessarily detailed) information on topics covered by that legislation. In addition, a statement should describe the options for the timing of decommissioning, and it is helpful to put these within the context of Government policy. Further detail on such interfaces is provided in Appendix 2.
22. All relevant health, safety and environmental protection law will apply during decommissioning work for example:
- Health and Safety at Work (etc) Act 1974 [6];
 - Management of Health and Safety at Work Regulations 1999 [15];
 - Construction (Design and Management) Regulations 2007 [16];
 - Ionising Radiation Regulations 1999 [17] ;
 - Nuclear Installations Act 1965 (as amended) [7];
 - Radioactive Substances Act 1993 [18];
 - Environmental Protection Act 1990 [19]

Appropriate plans, risk assessments and control measures, as required by such laws, must be implemented. Consent to begin decommissioning under EIADR does not remove any such duties from licensees and / or employers, nor does this in anyway restrict or otherwise limit the ability of other regulators to fulfil their statutory duties.

Requirements for sites offered protection under European Law

23. Regulation 48 of the Conservation (Natural Habitats) Regulations 1994 (as amended) (the Habitats Regulations) [20] , requires that an appropriate assessment is carried out by the Competent Authority (HSE) on plans or projects which are likely to have a significant effect on a European site, being either a Special Protection Area (SPA)⁸, Special Area of Conservation (SAC) or candidate Special

⁸ Areas which support certain endangered, rare or vulnerable species (found in Annex 1 of the Directive) or regularly occurring migratory birds of European importance can be designated as SPAs under the European Communities Council Directive on the Conservation of Wild Birds (79/409/EEC), commonly referred to as the Birds Directive.

Area of Conservation (cSAC)⁹ before consent is given to any such plan or project. That Regulation applies only to consents listed in regulations 54 to 85 of the Habitats Regulations. This list does not expressly include consents granted under EIADR. This means that there is no express requirement for HSE to undertake an assessment under regulation 48 in relation to those EIADR consents. However, in practice HSE would make an appropriate assessment when considering the EIA carried out for applications for consent made under EIADR, when there are likely to be significant effects on a European site. Information contained in the Environmental Statement will be used to inform the appropriate assessment required under the Habitats Regulations. To enable an appropriate assessment to be carried out further information may be requested from the licensee. HSE will take into consideration the views of the appropriate nature conservation bodies and environmental agencies when determining whether the information provided is sufficient for the purposes of the appropriate assessment.

24. If the appropriate assessment undertaken cannot ascertain that the integrity of the European site will not be adversely affected and mitigation measures cannot avoid the adverse effects that are foreseen, then before giving the consent two tests in Regulation 49 of the Habitats Regulations would be required to be satisfied; the alternatives test and the overriding public interest test. If there are no alternative solutions and there are imperative reasons of overriding public interest for the decommissioning project to be carried out, then consent under EIADR may be granted notwithstanding a negative assessment of the implications for the European site. If consent is granted, necessary compensatory measures would be required to ensure that the overall coherence of the Natura 2000¹⁰ is protected. Such compensatory measures would usually relate to the provision of alternative habitat and would need the approval of appropriate ministers.
25. In accordance with regulation 3(4) of the Habitats Regulations, HSE must have regard to the Habitats Directive when exercising its functions, for example, when considering applications for consent made under EIADR. The assessment process set out in the Habitats Regulations derives from obligations in the Habitats Directive and HSE will follow that process in order to meet the requirements of the Directive.
26. In England and Wales, Section 28I of the Wildlife and Countryside Act [21] as inserted by the Countryside and Rights of Way Act [22] requires Natural England to be given 28 days notice for operations which are likely to damage the special features of a Site of Special Scientific Interest (SSSI). In Scotland, the Nature Conservation (Scotland) Act 2004 [23] requires Scottish Natural Heritage to be given 28 days notice for operations which are likely to damage the special features of a Site of Special Scientific Interest (SSSI). In accordance with the requirements of these Acts, HSE will give the appropriate nature conservation body at least 28 days notice before granting consent under EIADR when there are

⁹ Areas containing rare or vulnerable habitats or species, which are of European Union interest, can be designated as Special Areas of Conservation (SACs) under the Habitats Directive (92/43/EEC as amended by 97/62/EC). Prior to being ratified by the European Commission, these areas are referred to as candidate SACs (cSACs).

¹⁰ Natura 2000 is a European network of protected sites which include two types of areas, Special Protection Areas (SPAs) and Special Areas of Conservations (SACs).

activities in a project which are likely to damage the special features of an SSSI. Activities carried out in accordance with a consent granted in this way under EIADR may be carried out by the licensee without further notice from the licensee to the conservation body. If proposing to consent against the advice of Natural England, section 28I requires a second notice to be given stating how that advice has been taken into account and HSE must not allow the operation to commence within 21 days of the expiry of that second notice.

27. In accordance with the Natural Environment and Rural Communities Act 2006 [24] HSE will have regard to the purpose of conserving biodiversity, so far as is consistent with the proper exercise of their functions.
28. The Nature Conservation (Scotland) Act 2004 also requires that public bodies, in exercising any functions, further the conservation of biodiversity so far as is consistent with the proper exercise of those functions. In complying with this duty HSE will have regard to the Scottish biodiversity strategy.
29. In addition, there may be requirements in relation to the Water Framework Directive [25] regarding surface water and ground water that might be affected by pollution from the decommissioning project. The licensee should contact the Environment Agency (England and Wales) or the Scottish Environment Protection Agency (Scotland) for further advice.

Involving the public and other stakeholders in preparing the environmental statement

30. The intention of the EIA Directive and EIADR is to involve the public, through consultation, in considering the potential environmental impacts of reactor decommissioning projects and to make the decision making process open and transparent [26]. It is very useful for the licensee to engage with the public (as well as other stakeholders) from the earliest stages of the EIADR process. The advantage of early engagement of the public is that any adjustments resulting from justified public concerns can be made to plans before the environmental statement is submitted, thus facilitating consideration of the application and public participation.
31. The EIA process and preparation of the statement should be a collaborative exercise involving discussions with HSE, and other relevant organisations, such as statutory consultees, site stakeholder groups, local community liaison councils, groups who have specialist local knowledge, and other statutory organisations as well as members of the public. Where relevant appropriate EEA States should be contacted. The licensee should consider involving the local population in the development of the decommissioning programme, in particular, discussing concerns and expectations. Local government should be involved in discussions on changes in land use and asset disposal arrangements where relevant, with a view to benefiting the community.

Good practice guide to the style of environmental statements

32. The general public's interest in a major project is often expressed as concern about the possibility of unknown or unforeseen effects. By providing a full analysis of a

project's effects, an environmental statement can allay fears created by a lack of information [8].

33. The environmental statement should help to inform the public on the substantive issues which HSE will have to consider in reaching a decision. One of the aims of a good environmental statement should be to enable readers to understand for themselves how its conclusions have been reached and to form their own judgements on the significance of the environmental issues raised by the project [8,10]. In order for public participation to be effective, it is important that (subject to security considerations), the public should have access to all relevant information needed to form an objective opinion and contribute to the process. The information must be provided in a form easily understood by non-experts, although supporting technical information should be available publicly.
34. When preparing the environmental statement, the licensee may wish to take into account the points listed below, although these are not explicitly required in the statement. Following this advice should result in an environmental statement that is clear and thus aid consultees (and HSE) in forming views regarding the environmental impact of the proposed decommissioning project. Consideration could usefully be given to:
 - a) Describing the environmental effects of each option under consideration, showing that the chosen option will (at least) not result in significantly greater adverse impacts on the environment than other options;
 - b) Including strategies for monitoring the actual impacts of measures to be taken to avoid, reduce and, if possible, remediate significant adverse effects on the environment. This could cover gathering base-line data, and monitoring through the decommissioning project to demonstrate the effectiveness of the measures taken or to identify the need for measures to be reviewed and amended;
 - c) Providing a summary matrix of the different activities associated with the proposed work and the range of environmental parameters potentially affected, with some form of indication of the potential significance of any impact;
 - d) Providing a clear indication as to whether the project is likely to have significant effects on the environment of another European Economic Area State;
 - e) Ensuring that the strategy framework described includes up to date information regarding any relevant central government policy;
 - f) Using photographs, figures and diagrams where appropriate to clarify text; and
 - g) Ensuring that potential benefits to the environment arising from the decommissioning project are adequately addressed (such as the long term affect on visual impact due to removal of substantial buildings).

Pre-application opinion as to the content of the environmental statement

Regulation

6. - (1) Without prejudice to regulation 5, a licensee who is minded to apply for a consent to carry out a project may request the Executive to state in writing its opinion as to the information to be provided in connection with that application.

6 (2) The Executive shall, if it considers that it has not been provided with sufficient information to give an opinion on a request made under paragraph (1), notify the licensee of the matters in respect of which it requires further information and shall not be required to give an opinion under paragraph (1) until such further information has been provided.

Guidance

35. The pre-application opinion provides guidance to the licensee on what HSE (taking into account the views of consultees) considers should be included in the EIA and environmental statement. In order to inform HSE's pre-application opinion, the licensee should submit a scoping report. Whilst not being a formal requirement of EIADR, the pre-application opinion (or scoping) stage provides an opportunity for the licensee to define the intended scope of the EIA. At this stage, stakeholders should have an opportunity to express their opinions and concerns over the proposed decommissioning project and have them taken into account. In addition, the decision-making procedures and criteria should be described and feasible alternatives selected. Further guidance on the scoping process is given in the European Commission's guidance [10] and covers:

- identification of stakeholders (those parties who may have a justifiable interest in the decommissioning project);
- outlining the feasible alternatives;
- defining decision making procedures and criteria;
- screening the proposed feasible alternatives against the defined criteria (involving consultation with stakeholders). Alternatives which do not meet agreed decision making criteria (such as unacceptable environmental risks or excessive cost) are rejected at this stage;
- informing the public of the agreed decision making criteria and remaining alternatives;
- scoping for impacts of the remaining alternatives, in order to select the final alternatives for the remainder of the EIA process; and
- discussion and agreement of the final scoping report.

HSE is of the opinion that the scoping exercise will be more effective if it characterises the existing environment (baseline) and identifies which aspects of the impact of the project on the environment need to be considered in detail

within the EIA, and which require no further consideration (because the project will have negligible effect on these aspects). This will result in the EIA being focussed on the key issues. Thus the environmental statement need not be made over-complicated by the inclusion of unnecessary information. HSE considers that early involvement of stakeholders in the scoping stage is vital.

Regulation

6 (3) The Executive shall not give an opinion in response to a request under paragraph (1) until it has consulted the licensee, the consultation bodies and such other bodies as appear to the Executive to be appropriate having regard to the circumstances of the case, but the Executive shall, subject to paragraph (2), respond to such request within 21 days of the end of the period allowed by the Executive for responding to such consultation.

Guidance

36. The normal consultation period on the submitted scoping report will be one month. The bodies consulted will normally be the same as those who will be consulted on the environmental statement (paragraph 40 of this guidance). HSE will publicise consultations on the pre-application opinion and deal with comments in the manner described in paragraph 41. HSE will aim to display 5 copies of the scoping report at each location listed in paragraph 41 and the licensee may wish to take this into account when deciding how many copies to send to HSE. HSE will inform the licensee of the bodies to be consulted. HSE will post the pre-application opinion on its web site (<http://www.hse.gov.uk/nuclear>), send copies of the pre-application opinion to the consultees and place copies in the locations listed in paragraph 41.

Regulation

6 (4) An opinion given for the purposes of paragraph (1) shall not prevent the Executive subsequently requiring the licensee to submit further information.

Guidance

37. If, after issuing a pre-application opinion, HSE receives knowledge of potential effects on the environment that were not considered in the scoping report, it may ask for further information or evidence.

Provision of information to licensee

Regulation

7. The Executive and any other consultation body notified that a licensee has made or is proposing to make an application for consent under regulation 4(a) shall, if requested by the licensee or may without such a request, enter into consultation with the licensee to determine whether the body has in its possession any information which the licensee or that body consider relevant to the preparation of an

environmental statement and, if it has, the body shall make any such information available to the licensee.

Guidance

38. The consultation bodies are those listed in Regulation 2. HSE will consider all requests for information on an individual basis.

Procedure by the Executive

Regulation

8. - (1) Where the Executive receives in relation to a proposed project an application for a consent pursuant to regulation 4(a) it shall -

- (a) within 21 days of the date of receipt of such application notify the consultation bodies in writing of the name and address of the licensee and of the duty imposed on them by regulation 7 to make information available to the licensee; and*
- (b) inform the licensee of the names and addresses of the bodies notified under sub-paragraph (a) above.*

8 (2) Where the Executive is provided with an environmental statement pursuant to regulation 5 it shall -

- (a) consult the consultation bodies as to the information contained in that statement and for that purpose shall within 21 days of the date of receipt of such statement provide to them the information contained in that statement;*
- (b) require any body consulted under paragraph (1) to respond to the Executive within such reasonable time as the Executive may specify;*
- (c) send a copy of the environmental statement to the Secretary of State stating whether or not in the opinion of the Executive the project to which the environmental statement relates is likely to have significant effects on the environment in another EEA State; and*
- (d) shall inform any particular person who they are aware is or is likely to be affected by, or has an interest in, the application, who is unlikely to become aware of it by means of a local advertisement, by sending them a notice that contains those details set out in regulation 9(1) (i) and (j).*

Guidance

39. The normal consultation period on the application for consent from the licensee to carry out a decommissioning project (and accompanying environmental statement) will be three months.

40. In addition to the consultation bodies listed in Regulation 2, HSE may consult other bodies it considers appropriate, other bodies nominated by consultees, and other persons who ask to be involved in the consultation process. Examples of bodies that HSE may consult include:

- government departments;
- the devolved administrations;

- agencies and bodies (such as the Department of Trade and Industry, Food Standards Agency and Health Protection Agency);
- national organisations (such as the Nuclear Free Local Authorities);
- local groups

HSE will send a copy of the environmental statement and non-technical summary to each of the statutory consultation bodies and other consultees. The licensee should take this into account when deciding how many copies to send to HSE.

41. HSE will post details of the consultation on its web site, <http://www.hse.gov.uk/nuclear>. HSE will provide copies of the environmental statement at HSE's Knowledge Centre (Bootle), and at HSE's offices nearest to each power station or reactor site. In addition, HSE will also make available copies of documents at public libraries local to the power station or reactor site. HSE will aim to display 5 copies of the environmental statement at each location and the licensee should take this into account when deciding how many copies to send to HSE. Consultees who comment on the environmental statement will be asked whether they are content for their comments to be made available to the public, the licensee and any other relevant bodies. When consultees are content for this to happen, their responses will be made publicly available at HSE's Knowledge Centre (Bootle), and HSE's local area office and selected public libraries local to the power station or reactor site (at the end of the consultation). The licensee is provided with copies of responses upon receipt (when consultees have consented).
42. Early in the consultation process, HSE will review the environmental statement and make an initial assessment regarding the likelihood of the decommissioning project having a significant effect on the environment of another EEA state.
43. HSE will inform the Secretary of State of this initial decision. If the results of the consultation on the environmental statement cause HSE to change its opinion, HSE will inform the Secretary of State accordingly. If during the consultation on the environmental statement, the government of another EEA state informs HSE that it believes the decommissioning project is likely to have a significant effect on its environment, then HSE will inform the Secretary of State of this representation.

Regulation

8 (3) The Executive shall not grant a consent (whether for the purposes of these Regulations or otherwise) in relation to an application to carry out a proposed project unless -

- (a) there has been carried out an environmental impact assessment which takes into consideration the environmental statement provided under regulation 5;*
- (b) the Executive has taken into account -*
 - (i) the assessment carried out pursuant to sub-paragraph (a) above;*
 - (ii) the responses of those consulted pursuant to paragraph (2); and*
 - (iii) any representations made to it pursuant to sub-paragraph (i) of regulation 9(1); and*

- (c) where paragraph (3) of regulation 12 applies -
- (i) a period of at least 21 days has elapsed since the end of all periods of consultation agreed pursuant to sub-paragraph (5)(b) of that regulation; and
 - (ii) the Executive has taken into account any responses received by another EEA State pursuant to the provisions of regulation 12.

Guidance

44. If another EEA state has been consulted in accordance with regulation 12, HSE will take account of any responses received, and may seek the views of the appropriate statutory consultees in the UK, before reaching its final decision on whether to grant consent for the decommissioning project.

Regulation

8 (4) The Executive may, on granting a consent to carry out a project, attach to that consent such conditions as may appear to it to be necessary or desirable in the interests of limiting the impact of that project on the environment.

Guidance

45. If a decision is taken to grant consent for a decommissioning project, HSE may attach conditions to that consent. Such conditions may require, for example, the licensee to prepare and implement an environmental management plan that identifies mitigation measures, describes the implementation and effectiveness of mitigation measures, and describes changes to mitigation measures and reasons for changes in light of experience. The licensee must send a copy of the environmental management plan and its subsequent revisions to HSE and also make it available to the public. HSE must also be notified in advance of any significant changes to mitigation measures to prevent, reduce and where possible offset any major adverse effects on the environment. Regulation 16 of EIADR provides HSE with sufficient powers under the Health and Safety at Work (etc) Act 1974 [6] to effectively enforce these conditions.
46. A copy of the environmental management plan would be made available for public inspection at HSE's Knowledge Centre (Bootle), at HSE's local area office nearest to each power station or reactor site, and at selected public libraries local to the site, and the plan would be replaced by subsequent revisions as these are provided. A condition requiring an environmental management plan should give the public confidence that the licensee will continue to look after the environment after the consent is granted and is in line with the general approach of the regulations for openness and transparency.
47. Conditions additional to the example described above may be attached to the consent if HSE is of the opinion that this is necessary or desirable in the interests of limiting the impact of the project on the environment.

Publicity

Regulation

9. - (1) *Within 14 days of sending to the Executive an environmental statement pursuant to regulation 5, the licensee shall cause to be published in one or more newspapers circulating in the locality in which the project is to be carried out and, where required by the Executive, any other newspaper named by the Executive, a notice stating -*

- (a) the name and address of the licensee and that he is the applicant in respect of a consent for a project;*
- (b) the date on which the application was made;*
- (c) the address or location of the site at which the proposed project is to be carried out;*
- (d) that a copy of the application together with a copy of the environmental statement may be inspected by members of the public at all reasonable hours;*
- (e) an address (or addresses) in the locality of the power station or reactor at which those documents may be inspected and the latest date on which they will be available for inspection (being a date not less than 30 days later than the date on which the notice is published);*
- (f) an address (or addresses) (whether or not the same as that given under sub-paragraph (e) above) in the locality of the power station or reactor at which copies of the environmental statement may be obtained;*
- (g) that copies may be obtained there so long as stocks last;*
- (h) if a charge is to be made for a copy, the amount of the charge;*
- (i) that any person wishing to make representations about the application should make them in writing, before the date named in accordance with sub-paragraph (e), to the Executive at a specified address; and*
- (j) that the project is subject to an environmental impact assessment procedure.*

9 (2) *A copy of the notice required by paragraph (1) shall be provided to the Executive by the licensee within 14 days of the notice being published.*

9 (3) *The licensee shall ensure that -*

- (a) not less than 5 copies of the application for consent to carry out a project together with 5 copies of the environmental statement are available for inspection by members of the public at all reasonable hours at the address (or addresses) specified in the notice referred to in paragraph (1) pursuant to sub-paragraph (e) of that paragraph; and*
- (b) copies of the environmental statement are available at the address specified in the notice referred to in paragraph (1) pursuant to sub-paragraph (f) of that paragraph on payment of a reasonable charge reflecting printing and distribution costs.*

Guidance

48. It may be beneficial to the consultation process for the licensee to seek permission for copies of the environmental statement and scoping report to be placed in

public buildings, e.g. local post office, library and community buildings. The licensee should place 5 copies at each location.

49. HSE will publicise its decisions (and reasons for those decisions) in the manner described in paragraph 53.

Further information and evidence respecting environmental statements

Regulation

10. - (1) Where the Executive receives an application for consent to carry out a project in relation to which the licensee has submitted a statement which he refers to as an environmental statement for the purpose of these Regulations and the Executive is of the opinion that the statement should contain further information in order to be an environmental statement, the Executive shall notify the licensee in writing accordingly and the licensee shall provide that further information, and such information so provided is referred to in these Regulations as "further information".

Guidance

50. The further information should include sufficient background information to place it into context with the submitted application for consent. The further information provided should sufficiently address those issues raised by HSE in the request for further information.

Regulation

10 (2) Paragraphs (3) to (9) shall apply in relation to further information required of a licensee.

10 (3) Within 14 days of providing to the Executive the further information referred to in paragraph (1), the licensee shall cause to be published in one or more newspaper circulating in the locality in which the project is to be carried out and, where requested by the Executive, any other newspaper named by the Executive, a notice stating -

- (a) the name of the licensee;*
- (b) the date on which the application for consent to carry out the project was made;*
- (c) the address or location of the site at which the proposed project is to be carried out;*
- (d) that further information is available in relation to an environmental statement which has already been provided;*
- (e) that a copy of the further information may be inspected by members of the public at all reasonable hours;*
- (f) an address (or addresses) in the locality of the power station or nuclear reactor at which the further information may be inspected and the latest date on which it will be available for inspection (being a date not less than 30 days*

later than the date on which the notice is published);
(g) an address (or addresses) (whether or not the same as that given under sub-paragraph (f) above) in the locality of the nuclear reactor or power station at which copies of the further information may be obtained;
(h) that copies may be obtained there as long as stocks last;
(i) if a charge is to be made for a copy, the amount of the charge;
(j) that any person wishing to make representations about the further information should make them in writing, before the date specified in accordance with sub-paragraph (f), to the Executive at a specified address.

10 (4) *A copy of the notice required by paragraph (3) shall be provided to the Executive by the licensee within 14 days of the notice being published.*

10 (5) *The Executive shall send a copy of the further information to each person to whom, in accordance with these Regulations, the statement to which it relates was sent.*

10 (6) *The Executive may by notice in writing require the licensee to provide such number of copies of the further information as is specified in the notice (being the number required for the purposes of paragraph (5)).*

10 (7) *Where further information is required to be provided the Executive shall suspend determination of the application and shall not determine it before the expiry of 14 days after the date on which the further information was sent to all persons to whom the statement to which it relates was sent or the expiry of 30 days after the date that notice of it was published in a newspaper in accordance with paragraph (3), whichever is the later.*

10 (8) *The licensee who provides further information in accordance with paragraph (1) shall ensure that -*

- (a) not less than 5 copies of the information are available for inspection by members of the public at all reasonable hours at the address (or addresses) named in the notice published pursuant to sub-paragraph (f) of paragraph (3) as the address at which such copies may be obtained; and*
- (b) copies of the information are available at the address (or addresses) named in the notice published pursuant to sub-paragraph (g) of paragraph (3) on payment of a reasonable charge reflecting printing and distribution costs.*

Guidance

51. The normal consultation period for the further information provided by the licensee, will be one month. The same bodies will be included as were consulted on the environmental statement (paragraph 40). HSE will publicise the consultation and provide copies of the further information in the manner described in paragraph 41. HSE will aim to display 5 copies of the further information at each location listed in Paragraph 41 and the licensee should take this into account when deciding how many copies to send to HSE.

Regulation

10 (9) The Executive may in writing require a licensee to produce such evidence as it may reasonably call for to verify any information in his environmental statement.

Guidance

52. HSE may request the licensee to produce evidence to verify information in the environmental statement. The evidence provided should sufficiently address those issues raised by HSE in the request for evidence. Evidence is not subject to public consultation.

Information as to decisions

Regulation

11. Where an application for consent to carry out a project is determined by the Executive, the Executive shall -

- (a) in writing, inform the licensee and the Secretary of State of the decision;*
- (b) inform the public of the decision by publishing a notice in a newspaper circulating in the locality of the site concerned, or by such other means as are reasonable in the circumstances; and*
- (c) make available for public inspection at all reasonable hours at an office of the Executive nearest to the place where the power station or reactor is situated, and free of charge, a statement containing -*
 - (i) the content of the decision and any conditions attached thereto;*
 - (ii) the main reasons and considerations on which the decision is based, including information about the public participation process;*
 - (iii) a description, where necessary, of the main measures to avoid, reduce and, if possible, offset the major adverse effects of the project;*
 - and*
 - (iv) information regarding the right to challenge the validity of the decision and the procedures for doing so.*

Guidance

53. HSE will publish a report that contains:

- the content of HSE's decision and, if consent is granted, the content of any conditions attached to that consent;
- the main reasons and considerations on which the decision is based;
- information about the public participation process;
- a description, where necessary, of the main measures that the licensee will take to avoid, reduce and, if possible, offset any major adverse effects of the decommissioning project on the environment; and,
- information regarding the right to challenge the validity of the decision and the procedures for doing so.

In addition to informing the licensee and Secretary of State of the decision, the report will be posted on the HSE web site, (<http://www.hse.gov.uk/nuclear>) and will be displayed at HSE's Knowledge Centre (Bootle), and at HSE's area office nearest to each power station or reactor site. HSE will also make available copies of the report, at selected public libraries local to the power station or reactor site and send a copy to each statutory consultee and any other consultee that submitted comments. HSE will publish a notice of its decision in one or more newspaper(s) local to the site (the same newspapers used by the licensee to publicise the application for consent, as required by regulation 9(1)).

Projects likely to have significant effects on the environment in another EEA State

Regulation

12. - (1) *Where -*

(a) it comes to the attention of the Secretary of State that a project proposed to be carried out in Great Britain is the subject of an application under regulation 4 and is likely to have significant effects on the environment in another EEA State; or

(b) another EEA State likely to be significantly affected by such project so requests,

the Secretary of State shall -

(i) send to the EEA State as soon as possible and no later than their date of publication in the London Gazette, or the Edinburgh Gazette as the case may be, referred to in sub-paragraph (ii) below, the particulars mentioned in paragraph (2) and, if he thinks fit, the information referred to in paragraph (3); and

(ii) publish the particulars in sub-paragraph (i) above in a notice placed in the London Gazette or, where the project is in Scotland, the Edinburgh Gazette, with an indication of where further information is available; and

(iii) give the EEA State a reasonable time in which to indicate whether it wishes to be further consulted in accordance with the provisions of this regulation.

12 (2) *The particulars referred to in paragraph (1)(i) are -*

(a) a description of the project, together with any available information on its possible significant effect on the environment in another EEA State; and

(b) information on the nature of the decision which may be taken.

12 (3) *Where an EEA State indicates, in accordance with paragraph (1)(iii), that it wishes to participate in the procedure for which these Regulations provide, the Secretary of State shall as soon as possible send to that EEA State the following information -*

(a) a copy of the application for consent to carry out the project concerned;

(b) a copy of the environmental statement in respect of the project to which that application relates including any further information relating to the

project provided pursuant to regulation 10(1); and
(c) relevant information regarding the procedure under these Regulations, but only to the extent that such information has not been provided to the EEA State earlier in accordance with paragraph (1)(i).

12 (4) The Secretary of State in so far as he is concerned shall also -
(a) arrange for the particulars and information referred to in paragraphs (2) and (3) to be made available, within a reasonable time, to the authorities referred to in Article 6(1) of the Directive and the public concerned in the territory of the EEA State likely to be significantly affected; and
(b) ensure that those authorities and the public concerned are given an opportunity, before consent to the application is granted, to forward to the Secretary of State, within a reasonable time, their opinion on the information supplied.

12 (5) The Secretary of State shall, in accordance with Article 7.4 of the Directive -
(a) enter into consultation with the EEA State concerned regarding, inter alia, the potential significant effects of the project on the environment of that EEA State and the measures envisaged to reduce or eliminate such effects; and
(b) determine in agreement with the other EEA State a reasonable period of time for the duration of the consultation period.

12 (6) Where an EEA State has been consulted in accordance with paragraph (5), on the determination of the application concerned the Secretary of State shall -
(a) send to the Executive within 21 days of receipt any responses made by another EEA State pursuant to consultation under this regulation;
(b) inform the EEA State of the decision; and
(c) forward to it a statement of -
(i) the content of the decision and any conditions attached thereto;
(ii) the main reasons and considerations on which the decision is based; and
(iii) a description, where necessary, of the main measures to avoid, reduce and, if possible, offset the major adverse effects of the project.

Guidance

54. This regulation describes the procedures to be undertaken when it comes to the attention of the Secretary of State that a decommissioning project is likely to have significant effects on the environment in another EEA state (either as a result of information from HSE or representations from the EEA state itself).
55. HSE will take account of any responses received during consultation with the EEA state, and may seek the views of the appropriate statutory consultees in the UK, before reaching its final decision on whether to grant consent for the decommissioning project to commence.

Change or extension of project

Regulation

13. - (1) *Where there is a change or extension of -*
- (a) any project in respect of which a consent has been granted pursuant to regulation 4(b); or*
 - (b) any project which commenced prior to the coming into force of these Regulations, which change or extension may have significant adverse effects on the environment, the licensee shall apply to the Executive for a determination as to whether the project shall be made subject to an environmental impact assessment and shall not commence or continue with the change or extension to the project and any other part of the project that the Executive may direct until such determination has been made.*

13 (2) In determining for the purpose of paragraph (1) whether an environmental impact assessment is required, the Executive shall have regard to the relevant selection criteria set out in Schedule 2.

Guidance

56. Regulation 13 applies to projects that began before EIADR came into force, and to projects that have already been granted consent under EIADR, when such projects are subject to change or extension that may have significant adverse effects on the environment. Regulation 13 requires only those parts of the project that may be subject to the change or extension and any other part of the project HSE may direct to be halted until a decision is made and (if necessary) an EIA submitted.
57. Changes may be quantitative in nature and related directly to the project itself (for example, a change in the amount of radioactive waste generated, or a change in the number of heavy goods vehicles travelling to and from site). Alternatively, changes may be rather more qualitative in nature and might arise from changes in factors outside the control of licensees (for example, changes in government policy, or changes in the technology and expertise available).
58. It is the duty of the licensee to decide whether an application should be made to HSE for a determination as to whether an EIA is required and HSE advises that the licensee develop arrangements for managing this process. To assist licensees in the decision making process, HSE have developed criteria for screening changes or extensions to projects, which is based on HSE commissioned research. [27]. Appendix 3 is a flow diagram, which demonstrates the screening process that should be followed by the licensee. The decision on whether to seek a determination should be made with no consideration of the effects that might be provided by mitigation measures, even if these are required by other legislation.

Change or extension to the project

59. The term *change or extension* [to the project] may include any change or extension to an existing decommissioning project that results in any one or more of the following:

- changes to the commencement of works – delays or advancements in start date - alterations to the rate of decommissioning - speeding up or slowing down the process or programme of work or elements within the process or programme of work;
- changes in the sequence of decommissioning in terms of individual operations;
- changes to on-site arrangements in terms of alterations to the location of specific buildings or structures (e.g. waste storage areas);
- changes or extensions to the size or scale of buildings and structures;
- changes to any waste transportation arrangements;
- changes in the use of resources (e.g. energy, water, materials etc);
- changes to sentencing and waste disposal arrangements;
- changes to waste treatment arrangements on site;
- changes to any previously agreed emission rates from the site;
- changes to the type of material being emitted from the site;
- changes to the environmental media to which emissions are being released ; and
- any other modifications to processes or procedures that will lead to changes or extensions that are likely to have physical effects.

60. In addition to the above, changes or extensions to other non-site factors may give rise to any of the above changes. Such factors may include:

- regulatory change over the period of decommissioning;
- climatic change considerations;
- developments in decommissioning technology over time;
- changes in working practices, including the availability or otherwise of relevant skills;
- contractual changes or relationships, including alterations to funding regimes; and
- research and development.

These lists are not exhaustive. Changes or extensions to decommissioning projects which have been issued consent under EIADR will be considered in relation to the baseline of the environmental statement. Changes or extensions to decommissioning projects which started before the regulations came into effect and therefore have not been issued with consent will be considered in relation to the original decommissioning project plan.

When may a change have a significant environmental impact?

61. A change or extension to a project is considered significant in the context of these regulations when it is likely to result in significant adverse environmental effects. If any significant adverse environmental effects were likely HSE would need to make a determination on whether an EIA was required. For the purpose of this

regulation, adverse environmental effect is any environmental effect where the outcome of an action, following a reasonable and objective assessment, is demonstrably neither a neutral nor a positive environmental improvement.

62. For the purposes of EIADR, the concept of significance may be taken as that described in DETR's guidance Circular 02/99 [9]. The fundamental test to be applied in each case is whether that particular type of development and its specific impacts are likely, in that particular location to result in significant adverse effects on the environment.
63. When assessing the likely effect of a proposed change or extension, consideration must be given to cumulative effects such as might arise in the following circumstances:
 - at sites where there are ongoing commercial operations as well as decommissioning works;
 - the emission of radioactivity or other pollutants in excess of authorisations;
 - the cumulation of effects or different hazards in the environment (e.g. radioactivity plus asbestos and/or other chemicals); and
 - leaks following accidents or incidents leading to soil and/or other contamination.

Screening for changes which may have significant environmental impacts

64. It is the licensee's responsibility to screen for changes, which may be significant. Licensees may have developed their own criteria to screen for such changes which they are free to use. However, criteria have been developed (based on HSE commissioned research) to assist licensees in carrying out the screening process, to determine whether an application to HSE is required [27]. The HSE may request justification for any differences between the licensees and HSE's guidance criteria. The general approach is similar to that used under the Town and Country Planning (Environmental Impact Assessment) Regulations 1999 as amended [28]. The approach is explained in more detail in the Department for Communities and Local Government publication 'Environmental Impact Assessment: A guide to procedures' [8]. The system is based upon so-called *indicators* and *general screening criteria*, which should be applied to the change or extension. The indicators are given below:
 - Indicator of No Significant Adverse Effects, INSAE (Green)
 - Indicator of Likely Significant Adverse Effects, ILSAE (Red)
65. Indicator tables are given in Appendix 4 for INSAE, and ILSAE for different changes or extensions (arranged around different stages of decommissioning), together with a separate table for transport issues.
66. When an Indicator of No Significant Adverse Effect (Green) has been exceeded but an Indicator of Likely Significant Adverse Effect (Red) has not been triggered, a set of general screening criteria should be applied in conjunction with Schedule 2 of EIADR. The general screening principles are given below:

- The baseline environmental conditions off-site have changed since the decommissioning works commenced and the change or extension to the decommissioning process has the potential to give rise to significant adverse environmental effects;
- The change or extension would delay progress towards an overall reduction of hazard on or off site;
- The change or extension is required due to unforeseen circumstances arising during decommissioning and the change or extension was not considered as part of any former assessment or authorisation process or was assessed and rejected at that time on environmental, health or public safety grounds.

If any of the general screening criteria apply to a particular change or extension, the licensee will need to consult with the HSE on the need for an EIA. If none of the criteria apply a record of ‘finding of no significant effect’ (FONSE) can be completed for internal use and future reference. An example of a form that may be used to record a FONSE is given in Appendix 5.

67. The screening indicators (INSAE, ILSAE) and general screening criteria should be used to identify the level of assessment and need for consultation with HSE. This staged process is summarised in the diagram in Appendix 3.

Regulation

13 (3) The licensee shall provide to the Executive such information as it may require to enable the determination referred to in paragraph (1) to be made.

Guidance

68. The details and results of screening assessments, together with recorded FONSE or any desktop EIA that has been conducted, should be provided. A desktop EIA is an initial theoretical consideration of the environmental effects of the change or extension, which should indicate whether a full EIA is required. The amount of detail should reflect the complexity of the change or extension and the likely impact.

Regulation

13 (4) Where the Executive determines for the purposes of paragraphs (1) and (2) that an environmental impact assessment is required in respect of the project, regulations 4 to 10 and 12 shall apply as if any reference in those regulations to the project were a reference to the project as so changed or extended.

Regulation

13 (5) Where the Executive determines for the purposes of paragraphs (1) and (2) that an environmental impact assessment is not required in respect of the project, the Executive shall -

- (a) in writing, inform the licensee and the Secretary of State of the decision;*
- and*

(b) inform the public of the decision by publishing a notice in a newspaper circulating in the locality of the site concerned, or by such other means as are reasonable in the circumstances, stating the main reasons on which the decision is based.

Guidance

69. In addition to informing the licensee and Secretary of State, the decision will be posted on HSE's web site and in appropriate location(s).

Limitation on disclosure

Regulation

14. Nothing in these Regulations shall require the disclosure by a body of information that it is entitled not to disclose under regulations 12 and 13 of the Environmental Information Regulations 2004(a) or regulations 10 and 11 of the Environmental Information (Scotland) Regulations 2004(b).

Guidance

70. HSE's policy is to be as open as the law allows. Information that comes under regulation 12 and 13 of the Environmental Information Regulations 2004 [13] or regulations 10 and 11 of the Environmental Information (Scotland) Regulations 2004 [14] does not have to be disclosed. This would include information relating to locations of particularly rare species of plants or animals, the relevance of which might harm their conservation interest. However, due recognition of their presence and sensitivity are expected in the environmental statement.

Recovery of expenses by the Executive

Regulation

15. - (1) This regulation applies to any expenses incurred by the Executive which the Executive may determine to be incurred wholly or partly in connection with the carrying into effect of these Regulations and includes any sums paid by the Executive by way of remuneration, allowances or other payments to inspectors appointed under the 1974 Act.

15 (2) Where a licensee has applied for a consent to carry out a project or has requested an opinion pursuant to regulation 4 or 5 respectively, the Executive, in such cases and to such extent as it may appear to it appropriate to do so -

(a) shall require the licensee to repay to it so much of any expenses to which this regulation applies as may appear to it to be attributable to dealing with the application or request; and

(b) may require the licensee to make to it a payment or payments on account of such liability.

15 (3) A licensee shall comply with any requirement made of him under this regulation.

15 (4) Any liability of a licensee in respect of sums payable by him under this regulation on account of pensions shall, if the Executive so determines, be satisfied by way of contributions calculated at such rate as may be determined by the Treasury, by reference to remuneration.

15 (5) Where a licensee has made a payment under sub-paragraph (2)(b) above on account of an anticipated liability, then if the amount of the liability to which he becomes subject is less than the amount paid under that sub-paragraph, the Executive shall be liable to repay the difference to him.

Guidance

71. All expenses incurred by HSE in connection with the EIADR (including advertising costs) will be charged to the licensee concerned, in the same way as work charged for activities under the Nuclear Installations Act 1965 [7].

Enforcement

Regulation

16. - (1) Sections 18 to 26 and 33 to 42 of the Health and Safety at Work etc. Act 1974[5] shall apply to any requirement or prohibition imposed upon any licensee by these Regulations or any requirement imposed upon any person by regulation 7 as if the requirement or prohibition concerned had been imposed by regulations made under section 15 of that Act and any function of the Health and Safety Commission under any other provision of the 1974 Act which is exercisable in relation to any function of the Executive under or in respect of health and safety regulations (including their enforcement) shall be exercisable as if these Regulations were health and safety regulations for the purposes of that Act.

16 (2) The Health and Safety (Enforcing Authority) Regulations 1998¹¹ shall not apply in relation to the enforcement of any requirement or prohibition referred to in paragraph (1) above.

Guidance

72. The EIADR are enforced by the HSE as if they were health and safety regulations made under the Health and Safety at Work etc Act 1974 [6]. This gives inspectors the power to serve Improvement Notices, Prohibition Notices and prosecute in order to enforce the Regulations.

¹¹ S.I. 1998/494.

SCHEDULE 1

Regulation 5(1)

INFORMATION TO BE INCLUDED IN AN ENVIRONMENTAL STATEMENT

PART I

(which substantially reproduces the provisions of Annex IV of the Directive)

- 1.** Description of project, including in particular:
 - a description of the physical characteristics of the whole project and the land-use requirements during the construction and operational phases,
 - a description of the main characteristics of the production processes, for instance the nature and quantity of the materials used,
 - an estimate, by type and quantity, of expected residues and emissions (water, air and soil pollution, noise, vibration, light, heat, radiation and other similar matters) resulting from the operation of the proposed project.

- 2.** An outline of the main alternatives studied by the licensee and an indication of the main reasons for his choice, taking into account the environmental effects.

- 3.** A description of the aspects of the environment likely to be significantly affected by the proposed project, including in particular, population, fauna, flora, soil, water, air, climatic factors, material assets, including architectural and archaeological heritage, landscape and the inter-relationship between the above factors.

- 4.** A description of the likely effects of the proposed project on the environment, which should cover the direct effects and any indirect, secondary, cumulative, short, medium and long-term, permanent and temporary, positive and negative effects of the project, resulting from:
 - (a) the existence of the project;
 - (b) the use of natural resources;
 - (c) the emission of pollutants, the creation of nuisances and the elimination of waste,and the description by the licensee of the forecasting methods used to assess the effects on the environment.

- 5.** A description of the measures envisaged to prevent, reduce and where possible offset any significant adverse effects on the environment.

- 6.** A non-technical summary of the information provided under paragraphs 1 to 5 of this Part.

- 7.** An indication of any difficulties (technical deficiencies or lack of know-how) encountered by the licensee in compiling the required information.

PART II

(which substantially reproduces Article 5.3 of the Directive)

8. A description of the project comprising information on the site, design and size of the project.

9. A description of the measures envisaged in order to avoid, reduce and, if possible, remedy significant adverse effects.

10. The data required to identify and assess the main effects which the project is likely to have on the environment.

11. An outline of the main alternatives studied by the licensee and an indication of the main reasons for his choice, taking into account the environmental effects.

12. A non-technical summary of the information mentioned in paragraphs 8 to 11 of this Part.

SCHEDULE 2

Regulation 13(2)

CRITERIA FOR DETERMINING FURTHER ASSESSMENT

(which reproduces the provisions of Annex III of the Directive)

1. Characteristics of projects

The Characteristics of projects must be considered having regard, in particular, to -

- (a) the size of the project;
- (b) the cumulation with other projects;
- (c) the use of natural resources;
- (d) the production of waste;
- (e) pollution and nuisances;
- (f) the risk of accidents, having regard in particular to substances or technologies used.

2. Location of projects

The environmental sensitivity of geographical areas likely to be affected by projects must be considered, having regard to -

- (a) the existing land use;
- (b) the relative abundance, quality and regenerative capacity of natural resources in the area;
- (c) the absorption capacity of the natural environment, paying particular attention to the following areas -
 - (i) wetlands;
 - (ii) coastal zones;
 - (iii) mountain and forest areas;

- (iv) nature reserves and parks;
- (v) areas classified or protected under Member States' legislation; special protection areas designated by Member States pursuant to Council Directive 79/409/EEC on the conservation of wild birds¹² and Council Directive 92/43/EEC on the conservation of natural habitats and wild fauna and flora¹³;
- (vi) areas in which the environmental quality standards laid down in Community legislation have already been exceeded;
- (vii) densely populated areas;
- (viii) landscapes of historical, cultural or archaeological significance.

3. Characteristics of the potential impact

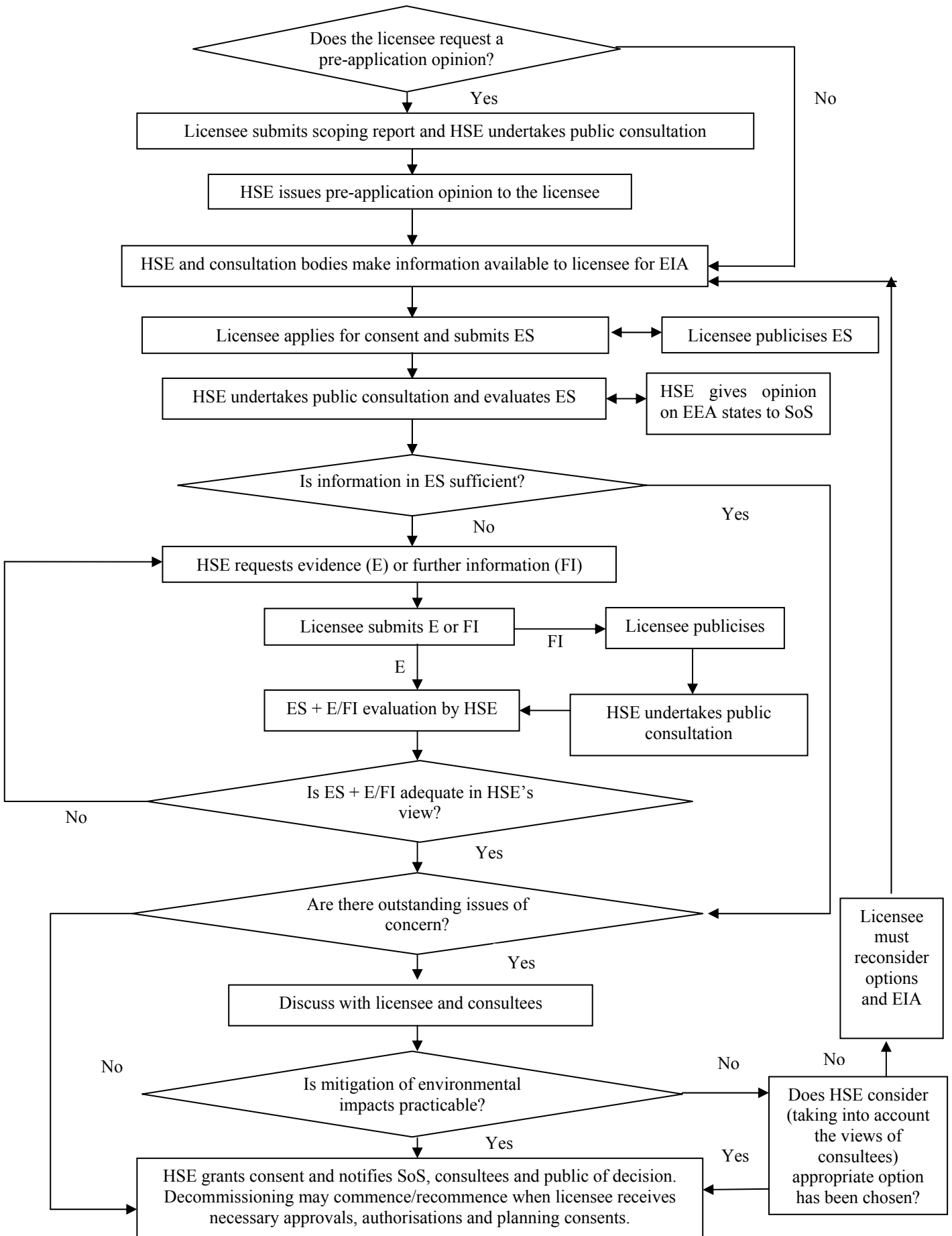
The potential significant effects of projects must be considered in relation to criteria set out under paragraphs 1 and 2, and having regard in particular to -

- (a) the extent of the impact (geographical area and size of the affected population);
- (b) the transfrontier nature of the impact;
- (c) the magnitude and complexity of the impact;
- (d) the probability of the impact;
- (e) the duration, frequency and reversibility of the impact.

¹² O.J. No L 103, 25.4.1979, p.1. Directive as last amended by the 1994 Act of Accession.

¹³ O.J. No L 206, 22.7.1992, p.7.

EIADR process flowchart



Interfaces

Interfaces with town and country planning

An environmental statement is likely to describe the need for temporary buildings on a site, such as facilities for the treatment and interim storage of radioactive waste. Such temporary buildings will be regulated under town and country planning legislation [28, 29 and 30] and enforced by the relevant local planning authorities. HSE will be made aware of applications and consulted on for planning permissions through routine activities and liaisons associated with enforcement of the licensing regime. Where these involve environmental impact assessment (EIA), the public will also be consulted before any decision is made.

Another area where permissions may be necessary is for any in-fill materials (to fill below-ground voids) that are used and have to be brought onto the site. This will be regulated under town and country planning and environmental legislation and enforced by the relevant local planning authorities and environmental regulators.

It follows, therefore, that once consent has been granted under EIADR, the licensee can begin work on all parts of a decommissioning project so long as the work undertaken does not require additional permissions under town and country planning legislation. Consent under EIADR does not remove necessary permissions under other regulations.

Interfaces with security, health, safety and environment legislation

An environmental statement needs to describe links with related security, health, safety and environment legislation. This includes legislation covering: security and terrorism; occupational health and safety; nuclear safety; radioactive contamination and discharges; treatment of non-radioactive contamination and wastes (involving materials such as asbestos). Some examples of topics covered by other legislation are given below:

- a) continuity of site management;
- b) site security and integrity, including human and animal intrusion;
- c) fire safety, including safety of additional contractors housed in temporary accommodation, procedures for dealing with incidents involving hazardous materials, and liaison with the local fire service;
- d) emergency arrangements;
- e) safety of plant, including reactor dismantlement;
- f) transport safety, including identifying standard road routes (with implications for congestion of narrow lanes), and dealing with incidents involving vehicle fires and leakage of hazardous material;

- g) health and safety aspects of dust control from, for example, masonry crushing on the site;
- h) integrity of flood defences; and
- i) release of radioactive material and non-radioactive wastes

This list is not exhaustive.

HSE is satisfied that control of such health, safety and environment matters can be achieved through regulation and enforcement, where compliance with relevant legislation would ensure that adverse environmental effects would be minimal. HSE needs to work closely with enforcers of related legislation, but must not encroach into their areas of enforcement or use EIADR to supplant other legal requirements and controls. The majority of the relevant legislation is enforced by HSE, the Office of Civil Nuclear Security (OCNS) and the Environment Agency (EA), or the Scottish Environment Protection Agency (SEPA). There are administrative arrangements in place between HSE, OCNS and EA or SEPA on working together on matters of mutual interest.

It follows, therefore, that once consent has been granted under EIADR, the licensee can begin work on all parts of the decommissioning project so long as the work undertaken does not require additional permissions under related security, health and safety and environment legislation. Work must be carried out in compliance with relevant health, safety and environmental protection legislation.

Treatment of wastes

One particular consideration in this regard is the treatment of wastes, which is specifically referred to in Schedule 1. The environmental statement should consider potential radioactive emissions (including indicative figures for emissions) and long-term storage of radioactive waste on the site, but note that authorised discharges will continue to be made under the Radioactive Substances Act 1993 [18], and regulated by EA or SEPA. Other wastes should also be addressed, including asbestos, and other hazardous and non-hazardous wastes, but here too, reference should be made to the regulation of such by EA or SEPA and local authorities.

Interfaces with government policy on radioactive waste management and the decommissioning of nuclear facilities

Government policy on radioactive waste management

Government policy on radioactive waste is summarised in the White Paper “Review of Radioactive Waste Management Policy: Final Conclusions” (Cm2919, published in July 1995) [31].

A review of the current government policy on long term management of solid higher activity radioactive waste was undertaken by the Committee on Radioactive Waste

Management (CoRWM). CoRWM published its final report on 31st July 2006 and is available on the CoRWM website at: www.corwm.org.uk

A review by Government (the UK Government and the devolved administrations) of the long term management of the UK's solid low level waste, has been completed and a revised policy statement was published on 26th March 2007 and is available on the DEFRA website at: www.defra.gov.uk

The Department for Environment, Food and Rural Affairs (DEFRA) chair the Radioactive Waste Policy Group (RWPG) which was set up to review and make recommendations on issues which arise in relation to radioactive waste management policy in the UK, radioactive discharges, and corresponding regulatory processes and arrangements. This group is represented by UK Government departments, the devolved administrations, the NDA and the principal regulatory bodies (e.g. HSE, EA, SEPA) and details can be found on the DEFRA website at: www.defra.gov.uk/environment/radioactivity/waste/rwpg/index.htm

Government policy on decommissioning the UK's nuclear facilities

Government policy on decommissioning the UK's nuclear facilities was previously summarised in paragraphs 120 to 131 of the White Paper "Review of Radioactive Waste Management Policy: Final Conclusions" (CM2919) [31]. The document stated that decommissioning should be undertaken as soon as is reasonably practicable, taking account of all relevant factors. All nuclear operators should draw up strategies for decommissioning redundant plant and include justification of the timetables proposed.

In November 2003, the government published a consultation document on the proposal to update and revise its nuclear decommissioning policy. Following consultation, a revised government policy "The Decommissioning of the UK Nuclear Industry's Facilities" was published September 2004, and replaces the previous statement contained in paragraphs 120 to 131 of Cm2919 [32].

The revised decommissioning policy covers all (existing and new) UK nuclear industry facilities. This includes power stations, other reactors, research facilities, fuel fabrication and reprocessing plants and laboratories on sites licensed under the Nuclear Installations Act 1965 (NIA 65). It also includes the site at Culham used for research into fusion and facilities owned by the Ministry of Defence and, where relevant, nuclear submarines and their liabilities. Each nuclear operator is expected to produce and maintain a decommissioning strategy and plans for the site, including its future use.

The Government White Paper, "Managing the Nuclear Legacy – A Strategy for Action" (Cm 5552) [33] was published in July 2002. Cm 5552 gave details on the Government's plans to set up a Nuclear Decommissioning Authority (NDA) – formerly known as the Liabilities Management Authority (LMA) - to take responsibility for the liabilities arising from past and future government civil nuclear programmes. The NDA came into operation 01 April 2005 and is responsible for setting agreed decommissioning timetables for these programmes (in consultation

with both the regulators and the licensees), and ensuring that the licensees carry out programmes effectively.

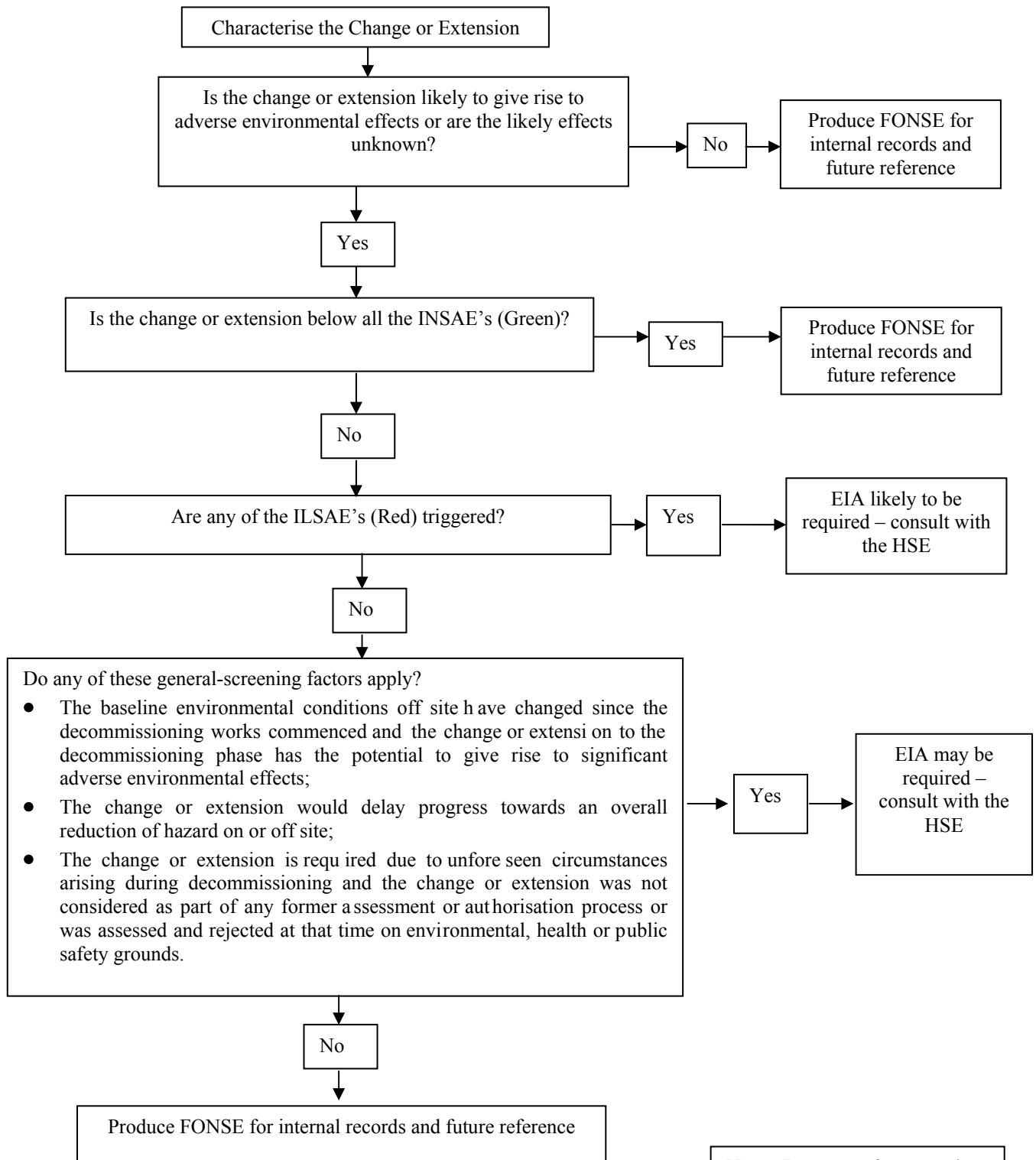
European Commission initiatives

Decommissioning is one of the activities for which the European Commission requires a submission by governments of Member States under Article 37 of the Euratom Treaty. The submission identifies the potential impacts on Member State countries of the decommissioning strategy of a particular nuclear installation.

EIADR contain arrangements for consultation with other States party to the Agreement on the European Economic Area (EEA) if a decommissioning project is likely to have significant environmental effects on those States. EIADR do not require a submission to the European Commission.

Regulations implementing Council Directive 2001/42/EC [34] on the assessment of the effects of certain plans and programmes on the environment (known as the Strategic Environmental Assessment (SEA) Directive) came into force 21 July 2004. The purposes of the SEA and EIA Directives are related in that both deal with environmental assessment, but the SEA Directive deals with strategic plans and programmes whereas the EIA Directive deals with specific projects (such as decommissioning under EIADR).

Screening for Changes or Extensions to the Decommissioning of Nuclear Reactors: Procedures Flow Chart



INSAE - Indicator of No Significant Adverse Effects
 ILSAE - Indicator of Likely Significant Adverse Effects

Note: In cases of uncertainty it may be advisable to submit the FONSE to the HSE for consideration.

Procedures for Screening Changes or Extensions to the Decommissioning of Nuclear Reactors

The tool presented below is based on a HSE commissioned report, which could be used as a basis for screening changes or extensions. However, as with the rest of the guidance, it is only guidance and licensees may choose alternative suitable methods. The HSE may request justification for any differences between the licensees and HSE’s guidance criteria.

Indicator Tables

The decommissioning phases in the tables below refer to one particular decommissioning strategy. However, the phases as written should reflect the main stages of decommissioning work, no matter how they are arranged in practice. The three indicator tables (B – D) cover the three phases of decommissioning. However, as changes to transportation arrangements can be made at all three phases, there is a separate table for transport-related issues (table A). The tables are as follows:

A	Changes to transportation arrangements during any phase of the decommissioning process	
B	Stage One: care and maintenance preparation phase	
C	Stage Two: care and maintenance phase	
D	Stage Three: site clearance phase	

The tables are arranged to reflect the ‘traffic lights’ principle for screening. So that each table is headed in the following way:

Column One	Column Two (Green)	Column Three (Red)
Potential changes	Indicator of No Significant Adverse Effect (Does Not Require EIA)	Indicator of Likely Significant Adverse Effects (EIA is likely to be required, consult with HSE)

When an Indicator of No Significant Adverse Effect (Green) has been exceeded but an Indicator of Likely Significant Adverse Effect (Red) has not been triggered, a set of general screening criteria should be applied in conjunction with Schedule 2 of EIADR. The general screening criteria are:

- The baseline environmental conditions off-site have changed since the decommissioning works commenced and the change or extension to the decommissioning process has the potential to give rise to significant adverse environmental effects;

- The change or extension would delay progress towards an overall reduction of hazard on or off site;
- The change or extension is required due to unforeseen circumstances arising during decommissioning and the change or extension was not considered as part of any former assessment or authorisation process or was assessed and rejected at that time on environmental, health or public safety grounds.

A. Changes to transportation arrangements during any phase of the decommissioning process

Column One	Column Two (Green)		Column Three (Red)
Potential changes	Indicator of No Significant Adverse Effect (Does Not Require EIA)		Indicator of Likely Significant Adverse Effects (EIA is likely to be required)
1. Change in transport mode availability 2. Change in the level of traffic generated 3. Change in transport routes 4. Change in transport modal split	1) Alternative transportation arrangements would make use of existing routes and modes (including modal split) that have been previously subject to environmental assessment and predicted traffic generation would not represent more than a 5% increase in the originally predicted flows; and 2) The change or extension would not result in other changes or extensions that would exceed any of the indicators set out in Column Two of these tables.		1) The change or extension requires prior permission from a competent authority under relevant regulations; or 2) The change or extension would require alterations to the transportation modal split, with potential for causing significant adverse environmental effects; or predicted traffic generation would represent more than a 5% increase in the originally predicted flows; or 3) Changes to transportation arrangements would involve the use of new or alternative routes or modes of transportation that have not previously been subject to environmental assessment; or 4) The changed transportation arrangements would require highway improvement works likely to have significant adverse environmental effects; or 5) The change or extension was considered and rejected at an earlier assessment on environmental or health or public safety grounds or a combination of these factors; or 6) The change or extension would result in other changes or extensions that would exceed any of the indicators set out in Column Three of these tables.

B. Stage One: care and maintenance preparations phase

Column One	Column Two (Green)	Column Three (Red)
Potential changes	Indicator of No Significant Adverse Effect (Does Not Require EIA)	Indicator of Likely Significant Adverse Effects (EIA is likely to be required)
1. Volume of contaminated material, wastes or soil greater than expected – resulting in a need to increase size of ILW store or other buildings etc	<p>1) The change or extension would not result in new development as defined by s55 (1) Town and Country Planning Act 1990; and</p> <p>2) The increase in the size of the store does not exceed a 25% increase in cubic capacity or 1000 square metres of floor space; and</p> <p>3) The construction or operation of any new or extended building would not increase background noise levels at the site boundary by more than 5 decibels; and</p> <p>4) The change or extension would not increase emissions to land, air or water; and</p> <p>5) The change or extension would not result in new development that would affect views into or out of a National Park, Area of Outstanding Natural Beauty or Conservation Area; and</p> <p>6) The change or extension would not result in other changes or extensions that would exceed any of the indicators set out in Column Two of these tables.</p>	<p>1) The change or extension requires prior permission from a competent authority under relevant regulations; or</p> <p>2) The extension to the store represents a 50% or greater increase in the cubic capacity of the building(s); or</p> <p>3) The extension of the store or any new buildings would be within 75 metres of any boundary of the site; or</p> <p>4) The change or extension results in the release of emissions to an environmental media not previously used or assessed for disposal; or</p> <p>5) The construction or operation of any new or extended building would increase background noise levels at the site boundary by more than 10 decibels; or</p> <p>6) The change or extension was considered and rejected at an earlier assessment on environmental or health or public safety grounds or a combination of these factors; or</p> <p>7) The change or extension would result in other changes or extensions that would exceed any of the indicators set out in Column Three of these tables.</p>

B. Stage One: care and maintenance preparations phase (continued)

Column One	Column Two (Green)		Column Three (Red)
Potential changes	Indicator of No Significant Adverse Effect (Does Not Require EIA)		Indicator of Likely Significant Adverse Effects (EIA is likely to be required)
<p>2. Change of timescale for works phase, speeding up or slowing down of operations</p> <p>3. Deferral or advancement of the start date for the works phase – resulting in unforeseen additional effects</p> <p>4. Changes to working practices including shift working</p>	<p>1) The change or extension does not represent an extension or reduction in timescale for works phase operations of more than 10%; and</p> <p>2) The change or extension would not increase background noise levels at the site boundary by more than 5 decibels; and</p> <p>3) The change or extension would not increase emissions to land, air or water, and</p> <p>4) The change or extension would not increase traffic flows to and from the site during the hours 7 p.m. To 7 a.m.; and</p> <p>5) The change or extension would not result in other changes or extensions that would exceed any of the indicators set out in Column Two of these tables.</p>		<p>1) The change or extension requires prior permission from a competent authority under relevant regulations; or</p> <p>2) The change or extension would increase background noise levels at the site boundary by more than 10 decibels; or</p> <p>3) The change results in significant changes to numbers of workers on site, number of vehicles, or waste generation;</p> <p>4) The change or extension was considered and rejected at an earlier assessment on environmental or health or public safety grounds or a combination of these factors; or</p> <p>5) The change or extension would result in other changes or extensions that would exceed any of the indicators set out in Column Three of these tables.</p>

B. Stage One: care and maintenance preparations (continued)

Column One	Column Two (Green)		Column Three (Red)
Potential changes	Indicator of No Significant Adverse Effect (Does Not Require EIA)		Indicator of Likely Significant Adverse Effects (EIA is likely to be required)
5. Reduction of height of reactor or other building(s) to reduce visual effect – with the potential for an increase in material to be removed from or stored on site 6. Increase in the use of resources including energy, water and the use of building and other materials	1) The change or extension would not result in new development as defined by s55 (1) Town and Country Planning Act 1990; and 2) The change or extension would not result in other changes or extensions that would exceed any of the indicators set out in Column Two of these tables.		1) The change or extension requires prior permission from a competent authority under relevant regulations; or 2) The change or extension would increase background noise levels at the site boundary by more than 10 decibels; or 3) The change or extension was considered and rejected at an earlier assessment on environmental or health or public safety grounds or a combination of these factors; or 4) The change or extension would result in other changes or extensions that would exceed any of the indicators set out in Column Three of these tables.

C. Stage Two: care and maintenance phase

Column One	Column Two (Green)		Column Three (Red)
Potential changes	Indicator of No Significant Adverse Effect (Does Not Require EIA)		Indicator of Likely Significant Adverse Effects (EIA is likely to be required)
<p>1. Volume of contaminated waste greater than expected, requiring changes or extensions to aspects of the decommissioning process – e.g. Increase in size of ILW store (in compliance with T&CP (EIA) 99)</p> <p>2. A national waste repository is approved and ILW can be removed from the site resulting in traffic effects and noise etc from the demolition and removal of storage facilities</p>	<p>1) The increase in the size of the store does not exceed a 25% increase in cubic capacity or 1000 square metres of floor space; and</p> <p>2) The change or extension would not increase background noise levels at the site boundary by more than 5 decibels; and</p> <p>3) The change or extension would not increase emissions to land, air or water, and</p> <p>4) The change or extension would not result in other changes or extensions that would exceed any of indicators the set out in Column Two of these tables.</p>		<p>1) The change or extension requires prior permission from a competent authority under relevant regulations; or</p> <p>2) The extension to the store represents a 50% or greater increase in the cubic capacity of the building(s); or</p> <p>3) The extension of the store or any new buildings would be within 75 metres of any boundary of the site; or</p> <p>4) Any contamination has not been contained within the existing site boundaries or it is not known whether contamination has spread beyond the site boundaries; or;</p> <p>5) The change or extension would increase background noise levels at the site boundary by more than 10 decibels; or</p> <p>6) The change or extension was considered and rejected at an earlier assessment on environmental or health or public safety grounds or a combination of these factors; or</p> <p>7) The change or extension would result in other changes or extensions that would exceed any of the indicators set out in Column Three of these tables.</p>

C. Stage Two: care and maintenance phase (continued)

Column One	Column Two (Green)		Column Three (Red)
Potential changes	Indicator of No Significant Adverse Effect (Does Not Require EIA)		Indicator of Likely Significant Adverse Effects (EIA is likely to be required)
<p>3. Change of timescale for care and maintenance phase, resulting in speeding up or slowing down of operations, with potential effects from radioactive discharges or dose rates, noise, traffic etc Note: this includes change of process to immediate decommissioning without the care and maintenance phase</p>	<p>1) The change or extension does not represent an increase or reduction in timescale for operations of more than 10%; and 2) The change or extension would not increase background noise levels at the site boundary by more than 5 decibels; and 3) The change or extension would not result in other changes or extensions that would exceed any of the indicators set out in Column Two of these tables.</p>		<p>1) The change or extension requires prior permission from a competent authority under relevant regulations; or 2) The change or extension would increase background noise levels at the site boundary by more than 10 decibels; or 3) The change or extension was considered and rejected at an earlier assessment on environmental or health or public safety grounds or a combination of these factors; or 4) The change or extension would result in other changes or extensions that would exceed any of the set out in Column Three of these tables.</p>

D. Stage Three: the site clearance phase

Column One	Column Two (Green)		Column Three (Red)
Potential changes	Indicator of No Significant Adverse Effect (Does Not Require EIA)		Indicator of Likely Significant Adverse Effects (EIA is likely to be required)
1. Non-availability of a final radioactive waste storage or disposal facility – resulting in the construction of a new store, extensions to an existing store, or alterations or extensive maintenance of existing buildings on the site	1) The change or extension would not result in other changes or extensions that would exceed any of the indicators set out in Column Two of these tables.		1) The change or extension requires prior permission from a competent authority under relevant regulations; or 2) The extension to the store represents a 50% or greater increase in the cubic capacity of the building(s); or 3) The extension of the store or any new buildings would be within 75 metres of any boundary of the site; or 4) The change or extension would increase background noise levels at the site boundary by more than 10 decibels; or 5) The change or extension was considered and rejected at an earlier assessment on environmental or health or public safety grounds or a combination of these factors; or 6) The change or extension would result in other changes or extensions that would exceed any of the indicators set out in Column Three of these tables.
2. Decision to change planned end use of site (e.g. unrestricted or green field), decision to permanently store or dispose of waste on site	1) The new use or development falls <u>below</u> any relevant regulatory <u>exclusion</u> thresholds for EIA in place at the time of the change or extension; and 2) The change or extension would not result in other changes or extensions that would exceed any of the indicators set out in Column Two of these tables.		1) The new use or development <u>exceeds</u> any relevant <u>Indicative Screening Criteria</u> for EIA in place at the time of the change or extension; or 2) The new use or development exceeds any relevant regulatory <u>inclusion</u> thresholds for EIA in place at the time of the change or extension

Appendix 5

Proforma for Finding of No Significant Effects (FONSE) Report

Name of Nuclear Reactor Installation, initial programme of works and this amendment	<i>XX reactor, Programme of works for the Decommissioning of XX reactor, amendment 1</i>		
Name and location of site and any adjoining sites of environmental or nature conservation interest	<i>It would be helpful for a map or plan to be provided, showing the footprint.</i>		
Person to contact about the FONSE			
Description of the initial programme of works for decommissioning	<i>Provide details of size, scale, the physical requirements of decommissioning, including scale and duration of temporary treatment buildings, storage or destination and transport of wastes, number of workers on site etc.</i>		
Description to changes or extensions	<i>Provide details of proposed changes (including scheduling, transport and storage arrangements, size of temporary buildings, dimensions of reactor after decommissioning, etc.) This should include a statement of how the change differs from the original decommissioning strategy</i>		
Are there other developments that together with the changes or extensions being assessed could affect the site (provide details)?	<i>Define boundaries for the assessment, details of responsibilities regarding other developments and their name and location. This might include change to transport infrastructure, designation of sites, location of housing, etc. (Maps will again be a useful tool to illustrate relationships)</i>		
<u><i>The Assessment of Significance of Effects</i></u>			
7. Describe how the amended programme of works (alone or in combination with other changes expected to occur) is likely to affect environment of the reactor site or other affected sites/impact receptors	<i>Include direct and indirect effects and explain how the assessment was carried out</i>		
Outline basis of evaluation of significance	<i>Thresholds, targets, indicators, designations, load</i>		
Explain why the effects are not considered significant	<i>This may be done with reference to key indicators of significance including degree of change to the site, duration of the project or programme of works, comparison with the environmental effects originally envisaged etc</i>		
List of Agencies Consulted:	<i>Provide contact name and telephone or e-mail address.</i>		
Response to consultation	<i>State whether the agencies consider the effects are significant or not. If the response indicates effects are significant, reasons to continue with the FONSE.</i>		
<u><i>Data Collected to carry out the Assessment</i></u>			
Who carried out the assessment	Sources of Data	Level of assessment completed	Where can the full results of the assessment be accessed and viewed?
<i>This could be the licensee, government agency or other relevant agencies</i>	<i>This will include field studies, existing records, consultation with relevant agencies etc.</i>	<i>This could include desktop study, full ecological assessment etc. Indicate the degree of confidence attributable to the assessment results.</i>	<i>Provide times and dates when the information can be viewed, addresses and telephone numbers of a contact person.</i>
<u><i>Overall Conclusions</i></u>			
Explain how the overall conclusion, i.e. Finding Of No Significant Effects, was arrived at.			

References

1. Council Directive 85/337/EEC: O J No. L 175, 05/07/1985, Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment
2. Council Directive 97/11/EC: O J No. L 73, 14/03/1997, Council Directive 97/11/EC of 3 March 1997 amending Directive 85/337/EEC on the assessment of the effects of certain public and private projects on the environment
3. Council Directive 2003/35/EC: OJ No L156, 25/06/2003 on public participation in respect of the drawing up of certain plans and programmes relating to the environment and amending with regard to public participation and access to justice Council Directives 85/337/EEC and 96/61/EC
4. Nuclear Reactors (Environmental Impact Assessment for Decommissioning) Regulations 1999, SI 1999 No. 2892; HMSO 1999, ISBN 0-11-085395-4
5. Nuclear Reactors (Environmental Impact Assessment for Decommissioning) (Amendment) Regulations 2006, SI 2006 No. 657; HMSO 2006, ISBN 0-11-0742427
6. Health and Safety at Work etc Act 1974, HMSO 1974, ISBN 0-10-543774-3
7. Nuclear Installations Act 1965, as amended S.I. 1974/2056 and S.I. 1990/1918, HMSO 1978, ISBN 0-11-801107-3
8. Department for Communities and Local Government, *Environmental Impact Assessment; A Guide to Procedures*, January 2000, ISBN 0 72 772960 8 (<http://www.communities.gov.uk/index.asp?id=1143250>)
9. Department of the Environment, Transport and the Regions (DETR) Circular 02/99, *Environmental Impact Assessment*, HMSO 1999.
10. European Commission, *Environmental Impact Assessment for the Decommissioning of Nuclear Installations; Final Report Volume 2; Guidance for Undertaking an EIA of Proposals to Decommission a Nuclear Power Plant*; June 2001, available at: (http://europa.eu.int/comm/energy/nuclear/publications/doc/eur20051_vol2.pdf)
11. Fortlage, (1990) *Environmental Assessment: A Practical Guide*, London, Gower Technical
12. Glasson, G., Therivel, R. and Chadwick, A. (1999) *Introduction to Environmental Impact Assessment 2nd Edition*, London, UCL Press
13. Environmental Information Regulations 2004, SI 2004 No. 3391; HMSO 2004, ISBN 0-11-051436-X
14. Environmental Information (Scotland) Regulations 2004, SI 2004 No. 540; HMSO 2004, ISBN 0-11-069356-6
15. Management of Health and Safety at Work Regulations 1999, SI 1999 No. 3242
16. Construction (Design and Management) Regulations 2007, SI 2007 No. 320 ISBN 9780110757896
17. Ionising Radiation Regulations 1999, SI 1999 No. 3232, ISBN 0-11-0856147
18. Radioactive Substances Act 1993, HMSO 1993, ISBN 0-10-541293-7
19. Environmental Protection Act 1990, HMSO 1990, ISBN 0-10-544390-5
20. Conservation (Natural Habitats, &c.) Regulations 1994; SI 1994 No. 2716. (as amended by The Conservation (Natural Habitats, &c.) (Amendment) Regulations 1997, SI 1997 No. 3055)
21. Wildlife and Countryside Act 1981 Ch69. HMSO 1981, ISBN 0105469815

22. Countryside and Rights of Way Act 2000, HMSO 2000 ISBN 0-10-543700-X
23. Nature Conservation (Scotland) Act 2004, ISBN 0 10 590067 2
24. Natural Environment and Rural Communities Act 2006, ISBN 0 10 541606 1
25. Directive 2000/60/EC of the European Parliament and of the Council establishing a framework for community action in the field of water policy
26. McCready-Shea S, Taylor FE, Batt J; *Experiences of dealing with environmental statements for nuclear reactor decommissioning projects under the EIA Directive*; Proceedings of The 9th International Conference on Environmental Remediation and Radioactive Waste Management, September 21 – 25, 2003, Examination Schools, Oxford, England
27. Oxford Brookes University, School of Planning, Impacts Assessment Unit, *Defining Screening Criteria for 'Changes or Extensions' to Decommissioning Nuclear Reactors; Research Report*; November 2002, Oxford; <http://www.brookes.ac.uk/iau>
28. Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999, SI 1999 No. 293; HMSO 1999, ISBN 0-11-080474-0 as amended 2000 (SI 2000 No.2867) & 2006 (SI 2006 No.3295)
29. Town and Country Planning Act 1990, HMSO 1990, ISBN 0-10-540890-5
30. Environmental Impact Assessment (Scotland) Regulations 1999, SI 1999 No 1, as amended by the Environmental Impact Assessment (Scotland) Regulations 2002, SI 2002 No. 324; HMSO 1999, ISBN 0-11-059107-0
31. Department of the Environment, *Review of Radioactive Waste Management Policy: Final Conclusions*, Cm 2919, HMSO 1995, ISBN 0-10-129192-2
32. 'The Decommissioning of the UK Nuclear Industry's Facilities'; DTI/Pub 7574/0.2k/09/04/NP. URN 04/1598
33. Department of Trade and Industry, *Managing the Nuclear Legacy – A Strategy for Action*, Cm 5552, HMSO 2002, ISBN 0-10-155522-9
34. Directive 2001/42/EC of the European Parliament and of the Council on the assessments of certain plans and programmes on the environment

Further Information

HSE priced and free publications are available by mail order from HSE Books, PO Box 1999, Sudbury, Suffolk CO10 2WA Tel : 01787 881165 Fax: 01787 313995 Website: <http://www.hsebooks.co.uk> (HSE priced publications are also available from bookshops and free leaflets can be downloaded from HSE's website : www.hse.gov.uk).

The Stationery Office publications are available from The Stationery Office, PO Box 29, Norwich NR3 1GN Tel: 0870 600 5522 Fax: 0870 600 5533 e-mail: customer.services@tso.co.uk, Website: www.tso.co.uk. (These are also available from bookshops.)

This document is available web-only at: www.hse.gov.uk/nuclear

© *Crown copyright* This publication may be freely reproduced, except for advertising, endorsement or commercial purposes. First published 2007. Please acknowledge the source as HSE.

Published by the Health and Safety Executive, 2007.