

Applying for a nuclear site licence for new nuclear power stations

A step-by-step guide

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Introduction

1 In order to construct and operate a nuclear power station (or most other types of nuclear installation) in the UK, a nuclear site licence must be granted by the Health and Safety Executive (HSE). This guide is aimed at organisations wishing to become a UK nuclear site licensee for the first time, and describes the actions that such an organisation should take in preparing a licence application. The guide should also act as a source of reference for organisations which already hold nuclear site licences in the UK and wish to apply for a licence to operate an installation on another site.

2 Although this publication has been prepared to provide guidance primarily for organisations intending to become a licensee in order to begin construction of a new nuclear power station, it broadly applies to the licensing of other types of nuclear installation. It also gives less detailed guidance on the regulatory process that applies once the licence has been granted, during the succeeding stages of construction, commissioning and operation.

3 The site licence is not the only legal permit or authorisation required to construct and operate a nuclear facility in the UK. Other authorisations are required from HSE and other regulators (most notably, the Environment Agencies and also the Department for Transport) to allow the construction and operation of most nuclear facilities. While the annex to this guide gives an indication of the main authorisations required from other regulatory bodies, it is not intended to be comprehensive, and licence applicants should ensure that they engage with all relevant regulatory bodies and also the Energy Division of the Department for Business, Enterprise and Regulatory Reform (BERR) at the earliest possible stage.

4 A nuclear site licence can only be granted to a corporate body and is not transferable. Re-licensing of an existing nuclear installation is not addressed here. HSE is preparing a Technical Assessment Guide on re-licensing which will be of help to organisations seeking to do this.

5 HSE has already published general information on the licensing of nuclear installations in the UK.¹ This guide supplements that document by setting out the steps required of an operator, potentially new to the UK, wishing to construct a new nuclear power station in the UK.

6 HSE has delegated its licensing function to the Nuclear Installations Inspectorate (NII). The security regulator, the Office for Civil Nuclear Security (OCNS), is also part of HSE's Nuclear Directorate. As this guide cannot cover every aspect of the licensing process, any organisation that is considering preparing a site licence application should contact the NII Chief Inspector as early as possible to ensure that resources are directed at the right areas.

Generic Design Assessment

7 HSE and the Environment Agency have introduced a new process of Generic Design Assessment (GDA) for new reactor designs, with joint arrangements between the regulators.² It is envisaged that similar co-ordination between HSE and the Environment Agency will be applied to deal with site licence applications.

8 The GDA process has been designed to be open and transparent and to allow public input.³ HSE will be looking at how these principles can be used for future site licence applications.

9 GDA can be undertaken before any site-specific licence application is made; HSE has published guidance on the process.⁴ The submission for GDA is expected to specify the characteristics of a generic site covering a range of potential UK sites, and the analysis should be done for this generic site. GDA does not replace the licensing process but the outcome of the GDA – a statement of Design Acceptance Confirmation – will be an important factor in informing HSE’s licensing decision. An organisation interested in HSE undertaking a GDA of a potential power station should write to the NII Chief Inspector at an early date to initiate discussions.

10 GDA is an integrated process involving safety, security and environmental assessments, carried out respectively by HSE’s NII and OCNS, and by the Environment Agency, as explained in the top-tier GDA guidance.²

11 The GDA process is separate from the licensing process, and this guidance describes the relationship between GDA and nuclear site licensing (the licensing process is described in the GDA guidance as Phase Two). Following completion of GDA, issues requiring further regulatory assessment and resolution may include:

- site-specific aspects not covered by the generic site envelope;
- other site-specific aspects;
- any other changes to the design or safety documentation since GDA;
- assessment of the licence applicant’s organisation;
- consideration of any exclusions in HSE’s statement of Design Acceptance Confirmation.

12 HSE anticipates that most potential nuclear power station operators will prefer the design to have completed the GDA process before submitting a site licence application, as this is likely to be more efficient. If the GDA process has not been completed then the licensing process will take longer to complete. However, it is still possible to apply directly for a site licence without the design having gone through GDA. In the case of a direct application without prior GDA, or an application before GDA is complete, the application to HSE must include all the information for the proposed design, the specific site and the licensee organisation. The regulators will then need to perform assessments equivalent to GDA as part of the licensing process.

Stepwise process for site licence application

13 For convenience, the licensing process has been divided into a number of steps, as outlined in Table 1. On the assumption that the GDA process has been completed, the licensing process would be expected to take around one year from site licence application to the completion of the licensing process, depending on various factors, including:

- the adequacy of the Step II licence application dossier (see below);
- the number and type of exclusions in HSE’s statement of Design Acceptance Confirmation;
- the novelty of the licensee applicant’s organisational structure;
- the number of concurrent site licence applications that HSE is considering.

Table 1 Stepwise licensing process

(This excludes other permissions considered in the annex)

Step		Responsibility		Leading to
		Licensee	NII	
I	Preparation and organisation	Develop intelligent operator status. Check applicant organisation status	Advice to applicant	
II	Collation of licence application dossier	Collation of licence application dossier, including: licence condition arrangements; emergency arrangements; develop safety case Pre-Construction Safety Report (PCSR)	Advice to applicant	Submission of licence application
III	Licence application	Send application to NII Chief Inspector	Acknowledge receipt	Start of assessment
IV	Nuclear site licence assessment	Continue to prepare organisation for full implementation	Assessment of site, organisation and safety case for the facility	Granting of licence, consent to start construction
V	Granting of licence		Grant and deliver site licence	Start of construction
VI	Operation under the licence	Construction. Commissioning, operation	Regulatory oversight and inspection	
VI.1	Construction	Implement and maintain new site licence organisation. Follow licence condition (LC) arrangements. Manage construction and change control. Prepare Pre-Commissioning Safety Report (PCmSR). Responsibility for all safety matters on site	Inspection and regulatory oversight of activities on the site. Place and release hold points via licence instruments as necessary	Issue of consent to commission

Step		Responsibility		Leading to
		Licensee	NII	
VI.2	Commissioning	Implement and maintain site licence organisation. Follow LC arrangements. Prepare Pre-Operational Safety Report (POSR). Responsibility for all safety matters on site	Inspection and regulatory oversight of activities on the site. Place and release hold points via licence instruments as necessary	Issue of consent to operate
VI.3	Operation	Safe operation and maintenance of the plant	Inspections and regulatory oversight of the plant	

Step I – Preparing to be a licensable body

14 During this preparatory step the prospective applicant should make and implement plans to become an organisation which is licensable under UK law. This means that, among other things, they have to:

- establish themselves as a corporate body;
- set up a suitable management organisation;
- work towards intelligent operator status.

Further details of these are given below.

Pre-application advice

15 So far as its resources allow, HSE will engage in dialogue with prospective licence applicants and provide advice on the licensing process and the expectations placed on a licensee organisation. HSE would normally expect to recover its costs for such advice from the prospective applicants.

The applicant organisation status

16 A licence applicant must be a corporate body (which may be incorporated by Charter or be a statutory corporation, not necessarily a registered company). The applicant organisation does not have to be incorporated in the UK. For applicants based in the European Union, HSE would normally expect the company to have been incorporated in an EU member state. The company should maintain that incorporation in accordance with the laws in force in that state. Information on the expectations for the applicant organisation is given in *The licensing of nuclear installations*.¹

17 For applicants whose organisation is incorporated in a state outside the EU, HSE would normally seek guidance from BERR as to whether this would be acceptable under the terms of the Nuclear Installations Act. Applicants should also seek the advice of other regulators as there may be other legal issues arising for non-EU based licence applicants.

18 Frequent interaction between the licence applicant and HSE (and other regulators) will be necessary throughout the licence application process. Consequently, it may be in the interests of both parties if the applicant establishes a UK-based corporate entity that would act as the focus for regulatory interactions.

Applicants already incorporated in the EU may choose to establish a UK presence by means of a subsidiary branch or agency.

19 It is HSE's expectation that the site licence applicant organisation will go on to be the corporate body which will operate the installation. If this is not the intention, the potential applicant should contact HSE for early discussions. However, the licensee does not have to own the site.

20 The prospective applicant will need to establish a management organisation and make plans to develop this further during the steps leading up to licensing. At the point of licensing, the applicant will need to have developed an organisational 'nuclear baseline'. The nuclear baseline should identify activities that could impact on nuclear safety and demonstrate the licence holder will have adequate organisational structures, resources and competences to carry out these activities and manage nuclear safety effectively. This nuclear baseline should form part of a safety management prospectus which identifies that there is an adequate management structure and capability, and there are sufficient resources, to discharge the obligations and liabilities connected with holding a nuclear site licence. Information on available guidance is given below.

21 The organisation and management structure set out in the nuclear baseline is not expected to be static; it must develop in a timely fashion to identify sufficient suitably qualified, trained and experienced resources of the prospective licensee to cover all safety-related aspects of the power station activities during construction, commissioning and subsequent operation. HSE therefore expects the original safety management prospectus to be accompanied by plans detailing how the organisation will evolve, including arrangements for review and revision of the prospectus.

Intelligent operator status

22 The prospective applicant must be able to demonstrate detailed knowledge of the engineering and safety case for all plant and operations on the licensed site. HSE requires that the licensee is fully in control of activities on its site, understands the hazards of its activities and how to control them, and is an intelligent customer for any work it commissions externally. The licence conditions require the licensee to have suitably qualified and experienced staff undertaking all activities that could affect safety on the site. For most potential reactor designs the expert knowledge will initially rest with the vendor and HSE will therefore expect to see appropriate strategies to transfer this knowledge and information to potential operators/site licensees. The GDA process provides an opportunity to allow the prospective licensee sufficient time to build up qualified and experienced staff and transfer knowledge to them from the vendor organisation.

23 HSE will expect this transfer of knowledge to be well advanced before a site licence application is made, and the applicant must be able to demonstrate to HSE's satisfaction that it is ready to take control of all activities on the site before the licence is granted.

24 To demonstrate that they have this 'intelligent operator' status, the applicant:

- might carry out a peer review of the Pre-Construction Safety Report (PCSR);
- might carry out the site-specific development of the PCSR;
- needs to demonstrate familiarity with the UK licensing system;
- should submit programmes for development of, for example,
 - the management organisation,
 - staff numbers and competence (range and depth);
- should be able to demonstrate the ability to understand, monitor and direct the nuclear safety aspects of the construction.

25 To ensure control of the design of the plant, there needs to be a Design Authority, as defined in INSAG-19 *Maintaining the design integrity of nuclear installations throughout their operating life*.⁵ Initially, the Design Authority may rest entirely within the vendor's organisation. There needs to be a process for transfer of knowledge from the designer to the applicant, to ensure that the licensee will have adequate Design Authority capability by the time of licensing. For guidance on Design Authority aspects, see INSAG-19. The applicant should therefore make and implement arrangements for knowledge transfer and technical support from the reactor vendor and discuss these arrangements with HSE. HSE expects that these arrangements will be based on the vendor maintaining a strong UK presence.

26 Information is available:

- Safety management prospectus (SMP) requirements are outlined in *The licensing of nuclear installations*.¹ Applicants should discuss the content and style of the SMP with HSE.
- Further guidance on safety management prospectuses is in preparation by HSE and is due to be published later in 2008.
- Information on the nuclear baseline, HSE's intelligent customer principle and its requirements for contractorisation is available in Technical Assessment Guides (TAGs).^{6,7,8}

A potential licence applicant should contact NII to discuss the regulatory requirements for an adequate safety management organisation and other issues surrounding the Step I preparations as appropriate.

27 When the applicant has developed and documented its organisation capability as required by Step I, it will be ready to move on to Step II, the collation of the application dossier (although some of this may be done in parallel with Step I).

Step II – Collation of licence application dossier

28 The supporting evidence required within the licence application dossier must include:

- a safety management prospectus including the nuclear baseline;
- a description of the installation and activities to be licensed;
- a statement confirming that the operation of the power station is 'Justified' as required by the Justification of Practices Involving Ionising Radiation Regulations 2004.^{9,10}
- a map of the site and, for a new site, its location with details of the local demographics. Annex 2 of *The licensing of nuclear installations*¹ provides a specification for the site map which will form part of the nuclear site licence. It also provides information on siting aspects;
- if the power station design has been subjected to a Generic Design Assessment, a verification that the specific site is bounded by the site envelope specified in the Design Acceptance safety case;
- a demonstration of conformity with any UK Government siting policies and requirements (see the annex);
- details of the ownership of the site or arrangements for its leasing (see *The licensing of nuclear installations*¹ and Licence Condition 3);
- licence condition compliance statements and top-tier arrangements (see *Nuclear site licence conditions*¹¹ and the corresponding HSE Technical Inspection Guides (TIGs));¹²
- the submission or review of adequate safety cases forming the Pre-Construction Safety Report (see paragraph 34 below),
 - the documents must be in English and, where measurements are given, metric units must be used,

- the applicant should discuss with HSE what the expectations for the content and style of the PCSR should be to maximise the usefulness to all parties;
- a statement of decommissioning arrangements (see *The decommissioning of the UK nuclear industries facilities*¹³);
- details of appropriate emergency arrangements (see the annex) and a suitable emergency plan. This may be limited in extent before nuclear fuel is brought onto the site;
- terms of reference for the licensee's Nuclear Safety Committee (see Licence Condition 13 (LC13), *Nuclear site licence conditions*¹¹ and the associated TIG12).

29 Details of NII's requirements for the above are given in documents published by HSE and are mostly available on the HSE website. Specific questions and requests for further information should be addressed to the NII Chief Inspector.

30 A potential applicant should discuss the application dossier with HSE before it is submitted. When the applicant has collated, checked and validated all the necessary information, it will be ready to move to Step III and make the application.

Step III – Licence application

31 Applications for nuclear site licences should be made to Her Majesty's Chief Inspector of Nuclear Installations at HSE's Redgrave Court offices. Discussions should be undertaken with HSE to agree the format of the submission (ie number of copies, electronic format etc).

Step IV – NII assessment

Charging and timescales

32 Following an initial review of the licence application, HSE will provide an estimate of the timescale required for completing the licensing assessment. HSE will also provide an estimate of its anticipated costs. It will charge licence applicants for the cost of its work under the Nuclear Installations Act 1965.

HSE assessment of the safety case (Pre-Construction Safety Report)

33 HSE will need to examine the Pre-Construction Safety Report (PCSR) to assess whether the operations at the site will be adequately safe. HSE's expectations for safety cases are set out in Safety Assessment Principles (SAPs) SC1 to SC8.¹⁴ HSE has published its internal guidance on its expectations for safety cases, including for PCSR, in Technical Assessment Guide T/AST/051.¹⁵

34 A PCSR can reference a safety case considered in a prior Generic Design Assessment (GDA) but will need to include additional information relating to the site-specific application (see paragraph 11). The licensing process for a site-specific licence application without a previous Generic Design Assessment is given in *The licensing of nuclear installations*.¹ The situation where a Generic Design Assessment had started but had not yet been completed before submitting a licence application would need to be discussed between the applicant and HSE.

35 The applicant will be expected to agree with HSE a schedule of safety case submissions leading up to the granting of the licence.

HSE assessment of the licence applicant's organisation

36 This will be done in accordance with the guides listed above and the Safety Assessment Principles MS1 to MS4 on Leadership and Management for Safety.¹⁴

37 HSE will seek assurance that the proposed management structures are embedded and working effectively before the licence is granted. Where re-licensing of existing nuclear installations has taken place, HSE has typically required a period of six months 'shadow working' to confirm the capability of the new organisation before granting the new licence.

HSE assessment of the site

38 HSE will use its Safety Assessment Principles¹⁴ which set out its key safety factors for judging the acceptability of any proposed site.

Discretionary consultation by HSE on insurance, justification and financial standing

39 HSE may consult other government departments on the following issues where those departments are best placed to advise.¹ The issues are:

- nuclear liability insurance – required by the Nuclear Installations Act 1965. The licence applicant should negotiate with BERR as to how this requirement can be satisfied;
- justification of the licensable practice in accordance with UK regulations (the Justification of Practices Involving Ionising Radiation Regulations 2004);
- the licensee organisation's financial standing.

40 For new nuclear power stations, the Government is proposing in its 2008 Energy Bill to introduce statutory requirements on nuclear site licence applicants which will require them to have in place an approved funded decommissioning programme before first using the site. That programme will require applicants to make adequate arrangements for covering the cost of decommissioning the site and managing any operational or decommissioning wastes. Before granting a nuclear site licence, HSE will require confirmation from BERR that any requirements which are placed on licence applicants by the provisions of the Energy Bill have been met.

Draft licence

41 Assuming satisfactory assessment, HSE will draft a nuclear site licence and this will be discussed with the applicant before it is granted.

Step V – Granting of licence

42 HSE will grant the site licence when:

- it is satisfied with its assessment;
- it has been assured by other regulators (in particular the relevant Environment Agency) that there are no factors which are likely to prevent them issuing any necessary approval;
- BERR has confirmed that there are no legal or policy reasons why a licence may not be granted; and
- planning permission has been given.

A paper copy of the licence, signed by the NII Chief Inspector, will be posted to the applicant.

Step VI – Operation under the licence

Construction

43 Once the nuclear site licence has been granted, the licensee must comply with relevant provisions of the Nuclear Installations Act 1965 and all the conditions that HSE has attached to the licence. It should be noted that the term 'operation' in the UK covers construction, commissioning, operation, maintenance, modifications,

decommissioning etc and the licence and licence conditions apply at all times.^{11,12}
Examples of licence conditions are:

- LC12 on Duly Authorised and other Suitably Qualified and Experienced Persons;
- LC13 on the Nuclear Safety Committee;
- LC19 on Construction of New Plant;
- LC36 on Control of Organisational Change.

It should be noted that some licence conditions, for example LC12 and LC36, have application throughout a licensee's organisation, up to the executive team and Board.

44 The licensee must be in control of the site and operations, and holds the nuclear liability. However, if the site is leased, the site owner will also have responsibilities as a dutyholder under the Health and Safety at Work etc Act.

45 Construction may start, but HSE may agree a set of hold points with the licensee allowing HSE to oversee satisfactory progress throughout construction. The licensee will not be allowed to proceed past a hold point without HSE issuing the corresponding licence instrument.

46 An example of a set of possible hold points that might be applied during the construction phase is:

- pouring of foundation concrete;
- first permanent concrete structure;
- mechanical access to radioactive waste building;
- installation of reactor pressure vessel;
- installation of reactor coolant pump support legs;
- commencement of pre-stressing of primary containment
- commencement of full-scope simulator training;
- commencement of primary protection system functional testing;
- primary circuit hydrostatic test;
- delivery of fuel to site.

There may also be hold points related to development of the licensee's organisational structure, and a demonstration that it will be adequate throughout the construction and commissioning period from licensing to operation.

47 The licensee needs to demonstrate how it will manage both conventional and nuclear safety during construction, and in particular how it satisfies itself that the construction and any work that is subcontracted will meet the design intent and will be conducted safely.

48 A schedule will need to be agreed for the submission of further safety documentation throughout the period of construction and on-site testing. HSE and the licensee may choose to agree licensing activity programmes for the different topic areas, with specific programmes of work by the licensee to complete the necessary safety case submissions in the post-licensing period. HSE's expectations for safety cases are set out in SAPs SC1 to SC814 and T/AST/051.¹⁵

- The pre-commissioning safety case must be acceptable to HSE before commissioning starts.
- Technical specifications, or operating rules deriving from the safety case, should be submitted to and agreed with HSE during the construction and before commissioning.
- It may also be necessary for the Maintenance Schedule to be submitted and agreed at this stage. Pre-Commissioning Safety Reports (PCmSRs) should be prepared and submitted to HSE during construction.

There will be a series of meetings between HSE and the licensee within an agreed hierarchical structure.

49 HSE is responsible for inspections and regulatory oversight of the plant. It will appoint a site inspector, and a programme of regulatory inspections will be introduced. Its expectations for licence condition compliance will be on a proportionate basis, but nevertheless the licensee is expected to have arrangements in place for all the conditions from the time the licence is granted. Attention is drawn specifically to LC20 on modification to design of plant under construction.^{11,12} If operators wish to have construction consent before all licence compliance arrangements are in place, they should contact HSE to discuss the issue.

50 The inspections will need to satisfy HSE that all the issues arising from the assessment of the Pre-Commissioning Safety Reports, the technical specifications and the maintenance schedule are resolved satisfactorily before proceeding to commissioning or operation.

51 The licence application will have included programmes for development of, for example:

- the management organisation;
- increase in staff numbers and expertise;
- the development of intelligent operator capability.

During construction HSE will expect to see evidence that these are being implemented and progressed accordingly. In any case, the licensee needs to build up the number of trained staff progressively through construction and commissioning, in order to be ready for full operation. HSE is likely to link such demonstration of progress to the agreed holdpoints during construction and commissioning.

Commissioning

52 When the appropriate licence instrument to permit the start of commissioning has been issued, commissioning may start. The licensee must comply with all licence conditions^{11,12} including, specifically, LC21 on Commissioning.

53 Well in advance, the licensee should agree with HSE a schedule for the submission of further safety documentation for the period of commissioning and on-site testing, leading to a Pre-Operational Safety Report (POSr). Guidance on HSE's expectations for safety cases, including commissioning and pre-operational stages, is given in T/AST/051.¹⁵ The safety case for these later stages should evolve from the PCSr (see paragraph 34). The POSr should include the commissioning results and report on any anomalies.

54 The inspections will need to show HSE that all the issues arising from the assessment of the Pre-Operational Safety Report and from commissioning are resolved satisfactorily before proceeding to operation.

55 Before active commissioning is started, adequate emergency arrangements should be in place and an emergency exercise must be completed to the satisfaction of HSE.

56 An example of a set of hold points that might be applied during commissioning of a power station is:

- initial test period (initial plant testing and cold functional testing);
- system and integrated testing period (unfuelled hot functional testing);
- pre-raise power period (fuel load and low power testing up to 5% power);

- initial power raise period (5% to 60% power);
- final power raise period (60% power up to full power).

57 At the end of satisfactory commissioning and agreement of the Pre-Operational Safety Report, HSE will issue a licence instrument giving Consent to Operate.

Operation

58 When the POSR has been accepted and the appropriate licence instrument permitting operation has been issued, normal operation of the plant may start. The licensee will remain responsible for the safe operation and maintenance of the plant and for meeting all licence conditions for the life of the site.

Decommissioning

59 The licensee is responsible for the entire life cycle. Further guidance on HSE's expectations is given in *The licensing of nuclear installations*.¹

Arrangements for appealing against licensing decisions

60 Where a licence applicant is dissatisfied with a decision by HSE and remains dissatisfied following representations to the appropriate inspector and their line management in HSE, the ultimate arbiter of the decision is HM Chief Inspector of Nuclear Installations. The Health and Safety at Work etc Act excludes a statutory right of appeal for nuclear licensing decisions. However, the applicant may seek a review by HSE of the process by which the licensing decision has been reached.

Annex – Requirements other than site licence

Government siting policies

1 Since the start of the UK's nuclear power programme in the 1950s, successive governments have developed policies on the siting of nuclear power stations, which relate to population density in the vicinity of proposed sites and are intended to limit the number of people that might be affected in the unlikely event of a major radiation release. UK Government siting policy is held by BERR, but HSE/NII acts on behalf of the UK Government to administer these policies and is required to take such siting policies into account when deciding whether to grant a nuclear site licence. Consequently, applicants should satisfy themselves that any proposed installation would satisfy the Government siting policy for that type of installation.

2 The current policy was tabled by the Secretary of State on 11 March 1988¹⁶ and is given in the United Kingdom's Third National Report on Compliance with the Convention on Nuclear Safety Obligations, September 2004.¹⁷ Siting issues include external hazards, demographics and social issues.

3 BERR is currently carrying out a process for a combined Strategic Siting Assessment and Strategic Environmental Assessment for new nuclear power stations.¹⁰ HSE is advising on demographic issues. Draft criteria, including proposed exclusionary and discretionary criteria, was published at the start of Stage 1.¹⁸ When the process reaches Stage 2 in late 2008, there will be an invitation for nominations of sites suitable for new nuclear power stations, explaining how environmental considerations have been taken into account. The degree of detail to be supplied with the nominations has yet to be decided. Stage 3 will close with the publication of a policy statement which will feed into a National Policy Statement or other statements for new build. This is related to the proposed changes to the planning process.¹⁹

Emergency preparedness and response

4 The relevant legislation is the Nuclear Installation Act 1965 and the Radiation Preparedness and Public Information Regulations (REPIIR) 2001. The applicant will need to satisfy both licence conditions and REPIIR 2001. The key licence condition is LC11 but others such as 7, 10, and 36 also apply. Licence Condition C11 requires the licensee to generate and own the on-site emergency plan. HSE has provided initial guidance on REPIIR in publication L126.²⁰ It should be noted that REPIIR makes specific requirements on the licensee such as the need under regulation 6(1)(a) to provide a report of assessment to HSE/ND 12 months before commencement of work with ionising radiation. The generation of the off-site plan under REPIIR 2001 is the responsibility of the local authority supported by information provided by the licensee. Therefore allowance will need to be made in accordance with the timescales identified in REPIIR 2001 for the processes required by the Regulations to be completed. The UK National Emergency Planning Liaison Group (NEPLG) has produced guidance on emergency planning requirements.²¹

Planning permission

5 Before construction of any new nuclear facility, an applicant must first obtain planning permission from the relevant planning authority. If an applicant wishes to install a new nuclear power station of greater than 50 MW capacity, currently they will need to apply to the relevant Secretary of State (the Secretary of State

for BERR for power stations in England and Wales and the Scottish Ministers for stations in Scotland) for consent under section 36 of the Electricity Act 1989. A successful section 36 consent application comes with deemed planning permission. It is HSE policy not to grant a licence to allow construction of a nuclear power station unless section 36 consent has been given.

6 The Government is committed to reform of the planning law related to national infrastructure projects, including new electricity generating stations. A Planning Bill is currently before Parliament. It is proposed that relevant parts of the Electricity Act as described above will be revoked and a new process for the planning approval of power stations will be instituted. Potential licence applicants should check the status of the Government planning reforms to ensure they understand the requirements for submission of planning applications. Changes to the planning requirements will be reflected in future issues of this guide.

Safeguards

7 The UK Safeguards Office at the Health and Safety Executive (HSE(UKSO)) works with the safeguards inspectorates of the European Commission and the IAEA to ensure that international safeguards obligations for the UK are complied with. Good procedures for nuclear materials accountancy are crucial to ensuring effective and proportionate implementation of such safeguards measures. Early engagement with HSE(UKSO) and thus the international inspectorates, who are the primary safeguards 'regulators', is both a requirement (eg preliminary information on new facilities must be provided to the inspectorates before construction starts) and also key to defining appropriate arrangements for the inspectorates' safeguards verification and inspection activities. Information is available on the HSE website.²²

Security requirements

8 The Office for Civil Nuclear Security (OCNS) regulates nuclear security requirements at civil nuclear sites and associated premises. Information is available on the HSE website.²³ HSE will not grant a licence until it is assured by OCNS that appropriate measures are in place to manage both physical and information security. Under the current legislative framework, no nuclear material may be brought to a site until an approved site security plan is in place. Prior to construction, OCNS expect that a construction security plan will be in place that describes the arrangements to be progressively installed to deliver the requirements of the site security plan prior to nuclear material being delivered to site.

Nuclear Decommissioning Authority

9 Some new licensing proposals, such as those for waste management facilities and waste repositories, will be linked to NDA's strategic role in waste management and disposal.

Environment Agency requirements for new authorisations

10 The process for applications for new authorisations is given in the Environment Agency Process and Information Document for Applications for New Authorisations etc.²⁴ There are also important general documents for Environment Agency regulation of nuclear sites.²⁵⁻²⁷

11 Information is available on HSE consultation of the Environment Agencies.² HSE will not normally grant a licence unless it has been assured by the Environment Agency/SEPA that they expect they will be able to grant an RSA93 (Radioactive Substances Act 1993) authorisation.

Article 37 of the Euratom Treaty on radioactive waste disposal

12 Information on this is given in the Environment Agency guidance.²⁴

Public Inquiry under the Electricity Act 1989

13 Information on this is given in *The licensing of nuclear installations*.¹ Proposals published by the Government for changes to the law in relation to planning for major infrastructure projects¹⁹ may have consequences for the planning approval process for nuclear power stations.

References

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Contact address

Enquiries from organisations interested in applying for a nuclear site licence, as well as formal licence applications, should be made to:

Her Majesty's Chief Inspector of Nuclear Installations
Nuclear Directorate
Health and Safety Executive
Redgrave Court
Merton Road
Bootle
Merseyside L20 7HS

e-mail: ndenquiries@hse.gsi.gov.uk

Telephone: 0151 951 4170

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