

LC 16 Site Plans, Designs and Specifications			
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Table of Contents

1. Introduction	2
2. Purpose and Scope	2
3. Licence Condition (LC) 16: Site Plans, Designs and Specification	3
4. Purpose of Licence Condition	4
5. Guidance on Procedures for LC 16	6
6. Guidance on Inspection of Procedures for LC 16	8
7. Guidance on Inspection of Implementation of Procedures for LC 16	10
8. References	11

1. Introduction

- 1.1. Many of the licence conditions attached to the standard nuclear site licence require, or imply, that licensees should make arrangements to comply with regulatory obligations under the conditions. ONR inspects compliance with licence conditions, and also with the arrangements made under them, to judge their suitability and the adequacy of their implementation. Most of the standard licence conditions are goal setting, and do not prescribe in detail what the licensees' arrangements should contain; this is the responsibility of the duty-holder who remains responsible for safety. To support inspectors undertaking compliance inspection, ONR produces a suite of guides to assist inspectors in making regulatory judgements and decisions in relation to the adequacy of compliance, and the safety of activities on the site. This technical inspection guide (TIG) is one of the suite of documents provided by ONR for this purpose.

2. Purpose and Scope

- 2.1. This guidance has been prepared for use during inspection activities carried out by ONR Nuclear Safety inspectors at licensed nuclear sites in judging the licensee's compliance with the requirements of licence condition (LC) 16. This guidance provides a framework for these inspection activities, within which the Inspector is expected to exercise his/her discretion proportionately applying this guidance in relation to the particular circumstances of the site under inspection. This framework is provided to facilitate a consistent approach to LC 16 compliance inspection.
- 2.2. This guidance is for use by all Nuclear Safety Inspectors in ONR. The guidance does not indicate when or to what extent LC 16 inspections should be carried out as these matters are covered in other documents such as site inspection plans.
- 2.3. The guidance provided is sub-divided into four main elements:
- 1) Purpose of the Licence Condition
 - 2) Guidance on procedures for LC 16
 - 3) Guidance on inspection of procedures for LC 16
 - 4) Guidance on inspection of implementation of procedures for LC 16

3. Licence Condition (LC) 16: Site Plans, Designs and Specification

16 (1) The licensee shall submit to ONR an adequate plan of the site (hereinafter referred to as the site plan) showing the location of the boundary of the licensed site and every building or plant on the site which might affect safety.

16 (2) The licensee shall submit to ONR with the site plan a schedule giving particulars of each such building and plant thereon and the operations associated therewith.

16 (3) If any changes are made on the site which affect the said buildings, plant or operations, the licensee shall forthwith send an amended site plan and schedule to ONR incorporating these changes.

16 (4) The licensee shall furnish to ONR such plans, designs, specifications or other information relating to such buildings, plants and operations as ONR may specify.

4. Purpose of Licence Condition

- 4.1. LC 16 is a standard condition attached to all nuclear site licences. Nuclear site licensees are required to comply with the licence condition. How this compliance is achieved is for the licensees to decide. However, ONR must judge the adequacy of this compliance. It carries out this function by compliance inspection.
- 4.2. The purpose of this licence condition is to require that the licensee follows certain requirements in regard to augmenting the information provided in Schedule 1 to its Site Licence, through the provision of a detailed site plan and schedule of all buildings, plant areas and associated operations which might affect safety. The buildings and plant included in the plan and schedule should be identified on the basis of safety significance set out in the arrangements in LC 14 and LC 23. The plan and schedule should both be subject to procedures ensuring they are kept up to date. In addition, the licensee must be able to respond to any ONR specifications to furnish such plans, schedules, designs or other information in relation to the buildings on the site, to ONR.
- 4.3. The site inspector should routinely check that all appropriate buildings and plant have been included in the plan and schedule prepared under this condition. In doing this, it should be borne in mind that buildings and plant do not necessarily have to contain nuclear matter to be able to affect safety of those that do, e.g. buildings or plant for storing inflammable or explosive materials should also be shown on the site plan. In view of this, the site plan should also include those buildings and plant which would be covered by the COMAH Regulations, where they are applicable (due to the potential impact on adjacent facilities containing nuclear matter).
- 4.4. This licence condition does not formally require the licensee to make and implement adequate arrangements; however, suitable written procedures should be produced to demonstrate that it is adequately managing the requirements of this condition.

LC 16 (1) places a duty on the licensee to submit an adequate site plan showing both the boundary of the licensed site and every building on site which might affect safety.

LC16 (2) places a duty on the licensee to submit a schedule with the site plan giving information on each building or plant and its operations.

LC16 (3) ensures that where changes are made on site an amended site plan and schedule are sent to ONR. Site plans and schedules are normally updated on a regular, frequent basis (annually) as the majority of changes with safety implications are covered by LC 19 - 22 arrangements.



LC16 (4) provides ONR with the power to specify that information related to buildings, plant or operations is sent to ONR on request.

5. Guidance on Procedures for LC 16

- 5.1. The following list provides ONR's view on what the licensee's procedures should contain to comply with the LC. This licence condition does not formally require the licensee to make and implement adequate arrangements. However, suitable written procedures should be produced to enable compliance with this condition to be auditable. For these procedures to be considered adequate, the following features should be addressed. If licensees have generic model(s) for procedures, then it is for the site to justify any deviation from the model(s).
- 5.2. Procedures should be provided to comply with LC 16 and should address the licence condition requirements.
- 5.3. Procedures should be readily available and should be up to date, signed by an appropriate senior manager and controlled under a system compliant with the requirements of LC 17.
- 5.4. The procedures should ensure that an appropriately identified plan is produced, detailing the licensed site boundary and buildings or plant on the licensed site which might affect safety. They should include the criteria used by the licensee to judge what "might affect safety" and identify the person responsible for ensuring compliance with this condition.
- 5.5. For sites constructing new nuclear installations, if during licencing a new nuclear build (NNB) site has been defined (the licenced site and the adjacent construction site), then the site plan should detail the NNB site boundary in addition to the other requirements of this licence condition. Further guidance on the requirements in relation to a NNB site and ONR NNB vires can be found in [1].
- 5.6. It is recognised that the NNB site boundary is a potentially flexible border which may change/be adapted during the construction build period to reflect site activity/project development and the licensees LC16 procedures should ensure that ONR is notified of any significant changes on an amended site plan.
- 5.7. A schedule should be produced and submitted with the site plan, providing details of buildings and plant, together with details of operations that are associated with such plant or buildings that might affect safety.
- 5.8. The procedures should ensure that suitable records of the schedule and plan are made and stored, in particular documenting any changes over the lifetime of the site.

- 5.9. The procedures should ensure that any changes to buildings, plant or operations that might affect safety are incorporated into the site plan and schedule and that the amended site plan and schedule are sent to ONR.
- 5.10. No change to the licensed site boundary can be made without reference to ONR. The procedures should ensure that any proposed changes to the boundary of the licensed site shall be notified to ONR. If the proposed change results in an increase in the area of the licensed site, then they should make it clear that a new site licence will need to be issued by ONR. A reduction in the size of the licensed site requires a variation to the site licence to be issued by ONR, with due consideration being given to any related delicensing requirements.
- 5.11. The procedures shall ensure that all plans, designs, specifications or any other information relating to such buildings, plant or operations will be furnished to ONR in response to a Specification for submission of such information, issued by ONR under Condition 16 (4).

6. Guidance on Inspection of Procedures for LC 16

- 6.1. This section is to assist inspectors in judging the adequacy of the licensee's procedures. The following list is neither exclusive nor exhaustive and will be subject to review and revision in the light of operational experience. It does, however, provide a list of aspects of LC 16 that can be examined during routine inspections.
- 6.2. Check that procedures have been made to demonstrate compliance with the LC. In particular, check that it is clear in the procedures that proposed changes to the licensed site boundary cannot be made without prior reference to ONR.
- 6.3. Examine the compliance procedures layout and check that it is consistent with site requirements of its management system.
- 6.4. Review the procedures to establish validity, whether any changes have been made since the last review and whether the identified responsible persons are correct. Note whether instructions, methods and quality assurance rules claimed in procedures have been followed and whether any changes have been incorporated and validated.
- 6.5. Examine the procedures concerning the production of a site plan and check that they cover all buildings or plant important to safety. Confirm that the criteria used in the procedures are satisfactory and include buildings or plant that would, for example, be covered by COMAH Regulations where they are applicable (due to the potential impact on adjacent facilities containing nuclear matter).
- 6.6. Check that the procedures require a schedule to be produced in accordance with LC16 (2) that covers buildings and plant, together with operations carried out. Confirm that the procedure ensures that buildings, plant and operations on the schedule (and changes thereof) that may affect safety are appropriately considered in the applicable safety case via the relevant duty holders' arrangements. Confirm that the procedures require suitable records of the schedule and plan to be kept.
- 6.7. Check that the procedures cover changes on and to the licensed site. This will include incorporation of any changes to buildings, plant or operations with respect to the site plan and schedule. Confirm that matters connected with changes to the site licence are included.
- 6.8. Check that the procedures for NNB sites, where applicable require the NNB site boundary to be detailed on the site plan and for ONR to be informed of significant changes (as defined in the relevant procedures).



- 6.9. With respect to ensuring suitable interactions with ONR check that the procedures:
- 1) Ensure that all plans, designs, specifications or other information relating to such buildings, plant or operations will be furnished, following any specification issued under LC16 (4); and
 - 2) Identify the person responsible for such actions.

7. Guidance on Inspection of Implementation of Procedures for LC 16

- 7.1. This section is to assist inspectors in judging the adequacy of the licensee's implementation of their procedures i.e., the licensee is doing what their procedures say they should be. The following list is neither exclusive nor exhaustive and will be subject to review and revision in light of operational experience. It does, however, provide a list of aspects of LC 16 that can be examined during routine inspections.
- 7.2. Examine the current site plan and establish that buildings and boundaries in existence are as identified on the plan (including if applicable the NNB boundary). Confirm that all buildings and plant that might affect safety are included and that such buildings or plant that would be, for example, covered by the COMAH Regulations, if they are applicable, are also included (due to the potential impact on adjacent facilities containing nuclear matter).
- 7.3. Examine the records held on the site to establish that suitable documentation exists in the form of a schedule identifying the buildings, plant and operations that might affect safety. In parallel with LC 23 inspections, check that the safety of such operations has been covered by valid safety cases.
- 7.4. Check the plant modifications register and establish whether any new facilities that would require new or extended civil structures are included. If so, establish that the site plan has been consequently amended, or that amendment is in progress and that ONR has been or shortly will be duly informed. Decommissioned facilities should be included in the plant modifications register.
- 7.5. During inspection for LC 2 compliance, if it is evident that the site boundary does not align with the site plan, check whether the requirements of LC 2 (4) were followed and ensure that the responsible person identified in LC 16 procedures has co-ordinated both licence conditions' requirements. If, for any reason, the licensed site boundary is proposed to change, check that in the case of an extension, the requirement for a new site licence has been recognised. Similarly, if a reduction in the site is proposed, check that the requirement for a variation to the site licence is recognised and that any related site delicensing arrangements are applied.
- 7.6. Ensure that the licensee has applied the correct security classification to the site plan and building schedule. For example, the separate site plan or building schedule may typically warrant a lower security classification when each document is viewed or only available separately. However, a higher

security classification is generally warranted when the site plan and building schedule are combined or both available.

- 7.7. Changes to buildings, plants or operations, which may affect compliance with conventional fire safety requirements, should be checked by ONR fire safety inspectors, following notification by the ONR nuclear safety inspectors of any such changes.

8. References

- [1] A new nuclear build site is a site having the characteristics as defined in the Health and Safety (Enforcing Authority) Regulations 1998 regulation 2A, as amended by statutory instrument 2014/469.

Please note the amended regulations are available on West Law and can be summarised as follows:

“New nuclear build site” means a site which is immediately adjacent to a GB nuclear site (“the associated site”) or forms part of a construction site where construction work is being carried out wholly or mainly for the purpose of the installation of one or more nuclear installations on the associated site and by or on behalf of the person to whom the nuclear site licence for the associated site has been granted.

A site is not a new nuclear build site if, on the date construction work starts on that site, there is a nuclear installation installed on the associated site. A site ceases to be a new nuclear build site on the completion of the construction work.”