MAINTENANCE SCHEDULE

Introduction

Licence Condition 28 (*LC28*) (Examination, inspection, maintenance and testing) requires that the licensee shall make and implement adequate arrangements for the regular and systematic examination, inspection, maintenance and testing of all plant which may affect safety.

These arrangements shall provide for the preparation of a plant maintenance schedule for each plant. Once approved by the Office for Nuclear Regulation (*ONR*), no alteration or amendment is made to any approved part of any plant maintenance schedule unless ONR has approved such alteration or amendment.

Licence Conditions closely associated with LC28 include the following.

- Licence Condition 25 (*LC25*) Operational Records.
- Licence Condition 27 (*LC27*) Safety Mechanisms, Devices and Circuits.
- Licence Condition 29 (*LC29*) Duty to Carry out Tests, Inspections and Examinations.
- Licence Condition 30 (*LC30*) Periodic Shutdown.

As detailed in the ONR Safety Assessment Principles (*SAPs*) and in particular Safety Assessment Principle SC.4 (Safety Case Characteristics) the safety case should be accurate, objective and demonstrably complete for its intended purpose. In accordance with the SAPs and with respect to operating instructions, the safety case should '*provide the basis for safe management of people, plant and processes. (For example, the safety case should address management and staffing levels* (NS-TAST-GD-061), *training requirements, maintenance requirements, operating* (NS-TAST-GD-060) *and maintenance instructions* (NS-TAST-GD-009)*, and contingency and emergency instructions).'*

Safety Principle SC.6 (Safety Case Content and Implementation) states that '*the safety case for a facility or site should identify the important aspects of operation and management required for maintaining safety and how these will be implemented'*. In particular, the safety case should justify how the requirements identified within it will be implemented affectively. Means of implementation should include the following.

- The operating limits and conditions (operating rules) required to ensure that the facility is operated safety at all times (NS-TAST-GD-035).
- The procedures and instructions that need to be followed.
- The required examination, inspection, maintenance and testing regimes justified in or assumed by the safety case.
- Inputs to emergency planning.

Before operating any facility or process that may affect safety, appropriate and representative commissioning, where possible, should be carried out. Commissioning testing will validate operating instructions utilising representative activities and / or conditions where possible. Commissioning will also familiarise operators with the operation of the facility or process and will include adequate training (NS-TAST-GD-027). Adequate communication systems are also required to enable information and instructions to be transmitted between

locations and if necessary off site. Communications systems should be robust during normal operations, fault conditions and severe accidents.

Applicable guidance, ONR Technical Assessment Guidelines (*TAGs*), are also available for workplaces and the work environment (NS-TAST-GD-062), human reliability analysis (NS-TAST-GD-063) and the allocation of function between human and engineered systems (NS-TAST-GD-064).

Additional Information and Guidance

- ONR, Safety Assessment Principles for Nuclear Facilities, 2014 Edition.
- ONR, NS-TAST-GD-061, Staffing Levels and Task Organisation, March 2017.
- ONR, NS-TAST-GD-060, Procedure Design and Administrative Controls, November 2017.
- ONR, NS-TAST-GD-009, Examination, Inspection, Maintenance and Testing of Items Important to Safety, May 2019.
- ONR, NS-TAST-GD-035, Limits and Conditions for Nuclear Safety (Operating Rules), March 2018.
- ONR, NS-TAST-GD-027, Training and Assuring Personnel Competence, July 2017.
- ONR, NS-TAST-GD-062, Workplaces and Work Environment, February 2017.
- ONR, NS-TAST-GD-063, Human Reliability Analysis, October 2018.
- ONR, NS-TAST-GD-064, Allocation of Function between Human and Engineered Systems, December 2017.