

COGNR2

Carry out nuclear inspections



Overview

This unit deals with the following:

- 1 Scoping, planning, carrying out and reporting on nuclear regulatory inspections
- 2 Carrying out inspections that are proactive and reactive

Previous Version:

This is the first set of NOS for Nuclear Regulators

COGNR2

Carry out nuclear inspections

Performance criteria

- You must be able to:*
- P1 work safely at all times, complying with health and safety, environmental and other relevant regulations
 - P2 develop a scope and plan of the inspection that is fit for purpose and meets your organisation's requirements
 - P3 implement the inspection in accordance with the plan
 - P4 identify circumstances that require immediate adaptations to the plan
 - P5 adapt the plan to respond to changing situations in accordance with your organisation's requirements
 - P6 identify areas of compliance or shortfall against standards appropriate to the organisation and activities being inspected
 - P7 communicate the findings of the inspection and your recommendations to those who need to know in accordance with your organisation's requirements
 - P8 agree the actions to be implemented to address the findings
 - P9 record the findings of the inspection in accordance with your organisation's requirements
 - P10 ensure that all agreed actions are implemented
 - P11 maintain your organisation's standards of conduct

COGNR2

Carry out nuclear inspections

Knowledge and understanding

You need to know and understand:

- K1 the health, safety, environmental and security and other statutory legislation, regulations and safe working practices and procedures governing nuclear activities and their implications for your area of work
- K2 the regulatory principles of proportionality, targeting, transparency, accountability and consistency
- K3 the legal basis and limits of regulatory powers
- K4 the structure and business operations of the organization being inspected
- K5 the technology, hazards, risks and their controls in the facilities or activities being inspected
- K6 the nature and contents of the permissioning, licensing and associated documents relating to the facilities or activities being inspected
- K7 inspection procedures and techniques
- K8 industry codes and standards
- K9 sources of information relevant to the inspection

COGNR2

Carry out nuclear inspections

Additional Information

Scope/range

- 1 Scope of inspections: people, processes, facilities, activities
- 2 Inspections: proactive, reactive
- 3 Potential impact: nuclear safety, nuclear security, environmental, societal, financial
- 4 Circumstances: during normal operations, during the response to a nuclear occurrence

Glossary

Accident is any unintended event, including operating errors, equipment failures or other mishaps, the consequences or potential consequences of which are not negligible from the point of view of protection or safety.

Activities include:

- 1 construction, commissioning, operation, decommissioning of any nuclear facility or reactor;
- 2 the accumulation, discharge, release and disposal of radioactive waste;
- 3 the transport of radioactive materials including the consignment, carriage and receipt of radioactive materials;
- 4 the safeguarding and security of nuclear facilities and materials.

Consultation is the process of seeking feedback methodically from a range of stakeholders relating to the regulation of current or future activities.

Emergency is a non-routine situation that necessitates prompt action, primarily to mitigate a hazard or adverse consequences for human health and safety, quality of life, property or the environment. It includes situations for which prompt action is warranted to mitigate the effects of a perceived hazard.

Enforcement means the activities directly associated with ensuring duty holders discharge their legal duties. Enforcement techniques may include, amongst others, giving advice (written or oral), withdrawing or varying permissions, licences and authorisations, serving notices, issuing cautions and prosecuting. The term implies the possibility of escalation if the duty holder does not act appropriately.

Facilities include any plant, building, facility, installation or establishment in which nuclear material is produced, processed, used, handled, stored or disposed of.

Incident is any unintended or intended event, including operating errors, equipment failures or other mishaps, the consequences or potential consequences of which are not negligible from the point of view of protection or safety.

Inspection is the process carried out by the regulator that involves assessing relevant documents held by the duty holder, interviewing people and observing site conditions, standards and practices where relevant safety related activities are carried out under the duty holder's control. Its purpose is to secure compliance with legal requirements for which the regulator is the enforcing authority and to promote improving standards of safety in

COGNR2

Carry out nuclear inspections

organisations. Inspections may not be confined to the operator's facility or installation.

Investigation is a reactive process which includes all those activities carried out in response to an occurrence or a complaint to:

- 1 gather and establish the facts
- 2 identify immediate and underlying causes and the lessons to be learned
- 3 prevent recurrence
- 4 detect breaches of legislation for which the regulator is the enforcing authority
- 5 take appropriate action, including formal enforcement.

An investigation may range from an enquiry by a single inspector about a minor occurrence or complaint to a large enquiry involving a team of inspectors.

Normal Operations are the range of conditions and events taken explicitly into account in the design of a facility, according to established criteria, such that the facility can withstand them without exceeding authorised limits by the planned operation of safety systems.

Nuclear Safety means the achievement of proper operating conditions, prevention of accidents or mitigation of accident consequences, resulting in protection of workers, the public and the environment from undue radiation hazards.

Nuclear Sector means those companies, organisations and authorities involved in the activities defined above.

Nuclear Security is the prevention and detection of, and response to, theft, sabotage, unauthorized access, illegal transfer or other malicious acts involving nuclear material, other radioactive substances or their associated facilities.

Nuclear Occurrence includes nuclear accidents, incidents, events, anomalies, near misses or any other occurrence that the regulator considers should be investigated.

Grant Permission includes the grant or issue of authorisations, licences, certificates, consents, agreements, letters of conclusion or acceptance by the regulator of a case or report submitted by the duty holder, or any other form of nuclear regulatory permission allowing the duty holder to build, commission, operate and decommission a nuclear facility or to start or continue a nuclear activity.

COGNR2

Carry out nuclear inspections

Regulator's Policy consists of those decisions made under regulatory discretion and is generally set out in guidance and procedures.

Refuse Permission includes refusing an initial regulatory permission or withdrawing or revoking an existing or current permission.

Regulation encompasses a broad range of activities undertaken by the regulator. It includes establishing the legal framework, setting standards, carrying out research, providing authoritative advice, permissioning, inspection, and enforcement.

Regulatory Body is an authority or a system of authorities designated by the government as having legal authority for conducting the regulatory process.

Response is the regulatory reaction to a nuclear occurrence.

Sanctions mean application of an enforcement measure.

Securing Compliance includes all enforcement work with duty holders plus work the regulator does with other stakeholders that encourages duty holders to discharge their duties.

Societal/Society includes not only the collections of individuals comprising a community or living under the same organisation or government who may be affected by nuclear facilities and activities, but also the area of land that may be contaminated, sustainability and general economic loss.

COGNR2

Carry out nuclear inspections

Developed by Cogent

Version number 1

Date approved September 2009

Indicative review date September 2011

Validity Current

Status Original

Originating organisation Cogent

Original URN NR2

Relevant occupations Professional Occupations; Engineering Professionals; Engineering; Manufacturing technologies

Suite Nuclear Regulators

Key words scoping, planning, reporting, nuclear regulatory inspections