



# Manual

**M-023**
**Issue: 008**

## Introduction to the Safety, Security & Environment Management Prospectus

<b>Notes</b>	
General Update to reflect Company name, organisational changes, management system documents and other changes	
<b>Impact of Revision</b>	Low
<b>Implementation Date</b>	On Issue
<b>Implementation Plan</b>	N/A

This Manual provides compliance arrangements for Licence Conditions as defined in PD-010

Before any changes are made the Process Owner shall be consulted to ensure compliance arrangements remain unaltered or to invoke the necessary Nuclear Safety Committee consultation as required by arrangements under PD-010.

**Distribution to NRS Dounreay**

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## 1. INTRODUCTION

Nuclear Restoration Services Limited (NRS) company number 02264251 (The Company), is the licensee for the nuclear licensed sites at Berkeley; Bradwell; Chapelcross; Dounreay; Dungeness A; Harwell; Hinkley Point A; Hunterston A; Oldbury; Sizewell A; Trawsfynydd; Winfrith and Wylfa.

In line with the Energy Act 2004, the assets and liabilities of the sites are held by the Nuclear Decommissioning Authority (NDA) with the Company operating the sites as a Site Licence Company (SLC).

As a **Operating Company**, the Company's shares are held by the NDA under the Energy Act 2004. The Company is run as an NDA subsidiary.

As it is the **Operating Company** that is awarded nuclear licenses and environmental permits, the Company organisation has been structured to meet all regulatory requirements on a stand-alone basis whilst operating as a subsidiary.

Where arrangements or responsibilities are specified, their application is defined as below:

- **Company** – refers to all Sites
- **NRS Sites** – refers to all **Company** Sites with exception of Dounreay.
- **NRS Dounreay** – refers to Dounreay Site only

## 2. PURPOSE

This document has been prepared as an introduction to the Safety, Security and Environment Management Prospectus (SSEMP) for the Company, to support the Nuclear Site Licenses, Environmental Authorisations, Licenses and Permits, for its nuclear licensed sites.

The Company does not maintain a separate SSEMP document; rather it adopts a modular approach of the elements, which are incorporated in its management system. The document is structured around the requirements of ONR - Technical Assessment Guide **NS-TAST-GD-072 Revision 4.1** and **Licensing Nuclear installations November 2021** Guide.

In totality the SSEMP describes the organisation and management arrangements in place that enable the Company to be a licensed entity and delivering environment, health, safety, security & safeguards protection, the totality of which is referred to as '**Nuclear Safety**'.

This document and the documents referenced from it:

- Provide an overall high-level description of the management arrangements and accountabilities for the Company.
- Describe how arrangements are made for compliance with the responsibilities and legal duties in terms of environmental protection including the Environmental Protection Act 1990, the Environmental Permitting (England and Wales), Environmental Permitting Regulations 2016 (EPR), The Environmental Authorisations (Scotland) Regulations 2018 (EA(S)R), and other relevant environmental legislation.

Maintenance of the overall SSEMP is the responsibility of the NRS EHSS&Q Director, on behalf of the Board.

The SSEMP is the 'Safety Case for the Company'; it deals with management issues and demonstrates the commitment of the Company to establish and maintain structures, processes and resources to manage, maintain and seek opportunities for improvement in Environment, Health, Safety, Security and Quality (EHSS&Q) governance and performance.

The safety, security, environment, health and management arrangements described throughout this document are based on the policies, standards and practices previously used by predecessor companies and have evolved over the years to reflect the current business of the organisation. Their strength and effectiveness have been demonstrated by the historical safety and environmental performance of the Company and its predecessors and their acceptability to both national regulators and the international community.

The SSEMP demonstrates the commitment of the Company to establish and maintain structures, processes and resources to maintain safety, security and environmental performance and, where possible, to seek opportunities for improvement.

### 3. SCOPE

The SSEMP for the Company comprises:

- The Introduction M-023 (this document).
- The Corporate Governance Framework M-010
- The Company Executive M-011
- The Company Functional Manual M-006
- NRS Sites Management and Governance Manual M-001
- NRS Dounreay Management and Governance Manual MAN 2030
- The Environment, Health, Safety and Quality Policy contained in S-111
- The processes/arrangements identified in the text below
- NRS Sites - Site Manuals
- Maps and details of local demographics for each site
- Nuclear Safety Committee terms of references for the sites

The SSEMP takes into account relevant guidance provided by regulators such as

- Office for Nuclear Regulation
  - The Licensing of Nuclear Installations
  - Technical Assessment Guide NS-TAST-GD-072
  - Security Assessment Principles for the Civil Nuclear Industry
  - Safeguards Technical Assessment Guidance SG TAST-GD-001
- Guidance issued by the Environment Agency, Scottish Environment Protection Agency and Natural Resources Wales.

## 4. DETAILS

The sections below provide summary information on relevant **NS-TAST-GD-072** elements, further information can be found in the documents identified above.

### 4.1. Activities

#### 4.1.1. Sites

The Company is responsible for the management of a large portfolio of sites across the UK within the NDA estate. The following briefly describe each of the sites for which the Company is the licensee and holder of environmental permits, licenses and authorisations. Maps for each site are supplied separately.

**Berkeley-** is located adjacent to the River Severn in Gloucestershire and ceased generation in 1989. Its two gas cooled Magnox reactors have been subsequently defueled, and the site is currently undergoing decommissioning.

**Bradwell** - is located adjacent to the River Blackwater in Maldon, Essex and ceased generation in 2002. Its two gas cooled Magnox reactors have been subsequently defueled and the site is in Care and Maintenance managed from Sizewell Site.

**Chapelcross** - is located near the Solway Estuary in Dumfriesshire and ceased generation in 2004. Its four gas cooled Magnox reactors have been subsequently defueled and the site is currently undergoing decommissioning.

**Dounreay** - is located in the Scottish Highlands on the North Sea coast and was the centre of UK research and development into fast reactors from 1954 until 1994. Over 180 facilities were built on 135 acres of land, including experimental and prototype fast reactors, a material test reactor, fuel reprocessing and examination facilities, waste storage and disposal, and fuel fabrication. The site is currently undergoing decommissioning and, with Dounreay's history of experiments with plutonium fuel, its decommissioning is one of the most complex in the world.

**Dungeness A** - is located on the south coast in Shepway, Kent, and ceased generation in 2006. Its two gas cooled Magnox reactors have been subsequently defueled and the site is currently undergoing decommissioning.

**Harwell-** forms part of the land at the Harwell Oxford Campus, which is designated to the NDA, situated near Didcot in Oxfordshire. NDA holds a lease for the designated site granted by the United Kingdom Atomic Energy Authority. The reactors and other prescribed nuclear installations at Harwell comprise:

- B220 radio-chemical laboratory, (partly decommissioned);
- Installations designed or adapted for the processing and storage of irradiated nuclear fuel and bulk quantities of any other radioactive matter which has been produced or irradiated in the course of the production or use of nuclear fuel; and
- Three defueled research reactors, partly decommissioned, known as DIDO, PLUTO and BEPO.

**Hinkley Point A** - is located on the West Somerset coast and ceased generation in 2000. Its two gas cooled Magnox reactors have been subsequently defueled and the site is currently undergoing decommissioning.

**Hunterston A** - is located in the west of Scotland in Ayrshire and ceased generation in 1990. Its two gas cooled Magnox reactors have been subsequently defueled, and the site is currently undergoing decommissioning.

**Oldbury** - is located adjacent to the River Severn in Gloucestershire and ceased generation in February 2012. Its two gas cooled Magnox reactors have been subsequently defueled and the site is currently undergoing decommissioning.

**Sizewell A** - is located on the Suffolk coast and ceased generation in 2006. Its two gas cooled Magnox reactors have been subsequently defueled, and the site is currently undergoing decommissioning.

**Trawsfynydd** - is located in the Snowdonia National Park in North Wales, ceased generation in 1991, its two gas cooled Magnox reactors were subsequently defueled and the site is currently undergoing decommissioning.

**Winfrith** - is situated at Winfrith Heath in Dorset. The reactors and other prescribed nuclear installations at Winfrith comprise:

- A defueled steam generating heavy water reactor, partly decommissioned, known as SGHWR;
- A defueled high temperature thermal reactor, partly decommissioned, known as DRAGON; and
- Installations designed or adapted for the processing and storage of irradiated nuclear fuel and bulk quantities of any other radioactive matter which has been produced or irradiated in the course of the production or use of nuclear fuel.

**Wylfa** - is located on the north coast of Anglesey in North Wales it ceased generation at the end of 2015. Its two Magnox gas cooled reactors were subsequently defueled and the site is currently undergoing decommissioning.

**Maentwrog** - Hydroelectric station is situated in Snowdonia, North Wales and has been producing electricity since 1928. Maentwrog is managed by Wylfa; this site does not hold a site licence or permits, and the management arrangements are essentially a subset of the Wylfa Site arrangements.

#### 4.1.2. Core Activities

The Company programme of work is defined by its Life-Time Plans (LTPs) which contain the programme of decommissioning activities. A significant subset of these LTPs relate to nuclear or environmental activities and to remain in control of nuclear safety and environmental management, the Company must have sufficient capability to carry these out.

The Company's nuclear and environmental activities ('core activities') can be generalised as:

- Commercial electricity generation
- 'Care and Maintenance' of redundant facilities
- Post Operational Clear Out (POCO) of redundant facilities
- Decommissioning and demolition of redundant facilities
- Radioactive materials transport
- Radioactive waste processing
- Solid and liquid waste (ILW/LLW/VLLW) storage and disposal

- Active effluent treatment and disposal
- Management of Chemicals
- Site remediation and de-licensing
- Estate and tenant management

#### 4.1.3. Control and Direction of Activities

The Company controls and directs its activities using its employees, agency staff, contractors, and tenants.

The management systems in their entirety govern activities within the Company. The principal management system documents that control and direct activities are:

- The Corporate Governance Framework M-010
- The Company Executive Manual M-011. Supported by
  - M-006 Company Functional Manual.
  - M-001 NRS Sites Management and Governance Manual.
  - MAN 2030 NRS Dounreay Management and Governance Manual at Dounreay.
- Those that describe and specify the Management System architecture, PD-010 Management System NRS Sites and MAN 2001 Management Systems Manual NRS Dounreay.
- Individual Site Manuals.
- Individual process documents and Site Manuals.
- Further applicable arrangements are referenced from these documents.

#### 4.1.4. Site Tenure

The freehold of the sites and the ownership of buildings and equipment are held by the NDA (with the exception of Harwell<sup>1</sup>). Property leases are in place to ensure the required rights of access, at all times, to meet regulatory requirements.

The Company, as licensee, has responsibility for the safe operation of the sites and absolute liability for injury to persons or damage to property within the limits and conditions of the Nuclear Installations Act 1965.

#### 4.1.5. Tenants and Leases

NDA and the Company's strategy, permits appropriate tenants to be present on their sites when this is consistent with the Company's responsibilities as a nuclear site licensee, including regard to the absolute liability for harm or damage from ionising radiation.

Leases on the nuclear licensed sites are granted by the NDA (in the case of Harwell as long term lessee) with the Company acting as the exclusive landlord's agent. The

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<sup>1</sup> The freehold of Harwell is owned by the United Kingdom Atomic Energy Authority (UKAEA) and leased back to NDA

Company acts to ensure licence compliance is not compromised by any prospective or current tenancy and considers the following:

- NDA policy is to de-license areas of the sites no longer appropriate to licensing controls which are suitable for other use, including use by tenants.
- The policy is to lease property only where this is consistent with:
  - the overall waste management and decommissioning strategy;
  - the Company being able to discharge its obligations under the nuclear site licence;
  - the Company's environmental and radiation protection policies and standards for the site;
  - the Company Mission and NDA strategy

The Company vets all potential tenants to ensure their suitability from a safety, security, and financial point of view.

Tenants are restricted to carrying out activities which are consistent with nuclear safety, compliant with the nuclear site licence and which are agreed by the Company. The leases require tenants to comply with specific site arrangements.

Further detail on tenant safety management is provided in PD-001 Asset Management **NRS Sites** and STD 0038 Tenant Operations Control at **NRS** Downreay.

## 4.2. Leadership

The Board and Executive provide overall leadership for the Company and have defined Mission and Policies to direct the Company. M-010 details the role of the Board, **M-011 the role of the Company Executive and M-006 the role of NRS Company Functions.**

**The Company is organised into two delivery businesses each under the leadership of a Managing Director defined through M-001 NRS Sites and MAN 2030 NRS Downreay**

### 4.2.1. Policies and Mission

The Environment, Health and Safety, and Security Policies are of critical importance to describing the requirements for focusing the organisation on achieving and sustaining high standards of performance. These and other Policies established by the Board along with the Company Mission are listed in S-111.

### 4.2.2. Values & Behaviours

The Company has developed a set of 'Values and Behaviours' to help the workforce understand what is expected from each employee **or contractor.** These are defined through **S-275 Standards and Expectations NRS Sites** and STD 2111 Downreay Professionalism Standards & Expectations at **NRS** Downreay

### 4.2.3. Conduct and Expectations

Everyone working on Company sites is expected to understand the safety behaviours and ways of working expected of them. All employees and contractors are therefore expected to comply with behavioural requirements as summarised in Company arrangements. Everyone is expected and encouraged to be familiar with the

requirements and to feel empowered to challenge anyone whose behaviours do not match expectations. This is defined in S-275 Working Safely- Our Standards and Expectations at NRS Sites and STD 2111 Dounreay Professionalism Standards & Expectations, at NRS Dounreay They bring together the high-level principles that run through the Company's standards to highlight the underlying ethics and approach.

#### 4.3. Governance Of Nuclear Safety, Security & Environmental Management

The Company governs nuclear safety, security and environmental management through its organisation defined within M-010 and M-011, and other management system arrangements. Conduct and expectations standards apply throughout the organisation and there is a continuous drive to improve the safety/security/environmental culture of the organisation. It is recognised that the entire organisation has a role to play in ensuring the Safety, Security and Environmental performance of the business.

The Company Executive have delegated responsibility from the Board, for operational management of the Company Sites.

For each allocated site, the Managing Director (MD) of the Delivery Business is accountable to the Chief Executive Officer (CEO) for the safe, secure and compliant delivery of the scope associated with the Lifetime Plan (LTP) and LC35 milestones, which includes ensuring the requirements of the Nuclear Site Licence, Authorisations, Consents & Permits are met. This is discharged through their Divisional Executive Teams as detailed in M-001 NRS Sites and MAN-2030 NRS Dounreay

For NRS Sites, this is supported through the appointment of a Site Director at each site. who acts as an 'Agent of the Licensee' accountable to the NRS Sites MD for ensuring compliance of all Nuclear Site Licence related activities on the site or undertaken on their behalf off the site.

Other Responsible Managers are identified in:

- M-006 for NRS Company Functions and
- Other Management System arrangements.

To control, direct and supervise operations, activities, and tasks in a safe manner in accordance with management system requirements, Responsible Managers ensure that staff are aware of and comply with the relevant requirements.

The employees of the Company are responsible for complying with procedures and instructions, following safe working practices, and taking a personal interest in promoting environmental protection, health, safety, and security at work.

##### 4.3.1. Internal Independent Challenge

A key aspect of the Company's governance arrangements for nuclear safety, security and environmental protection is the formal system for independent internal challenge.

Internal Independent Challenge is provided to the Company through the means detailed in:

- PD-016
- MAN 2030
- PRC 0012

A programme of independent assessment of sites, functions, facilities and departments is carried out to monitor compliance with management systems, regulatory and legislative requirements. This enables the provision of appropriate information to the Board and Executive for management review.

#### **4.3.2. Due Process Arrangements**

Governance arrangements for nuclear safety, security and environmental protection for the Company are provided by its Board, Executive, organisational and management system arrangements. It is further supported by independent advice, challenge, oversight and monitoring provided through 'Due Process' arrangements.

A key means of providing challenge and advice to the Company Board on nuclear safety, security and environmental management is through the Nuclear Safety Committees (NSC), the Dounreay Nuclear Safety and Environment Committee (DNSEC) [both constituted in fulfilment of Licence Condition 13] and the Safety, Security, Health and Environment Committee (SSHEC) a sub-committee of the Company Board. NSC terms of reference for each Site are supplied separately.

#### **4.3.3. Management of Safety Case and Modifications to Plant**

The Safety Case for the plant and its operation (including decommissioning activities) is the totality of documented information and developed arguments, which substantiates the safety of the plant, activity, operation or modification in question.

Management of the Safety Case is described in more detail through PD-018 Engineering Delivery for **NRS Sites** and MAN 2021 Safety Case Manual, at **NRS Dounreay**.

#### **4.3.4. Best Available Techniques**

The Company, in compliance with its permit conditions, adopts 'Best Available Techniques' (BAT) and Best Practicable Means (BPM) to consider, assess and minimise impacts on the environment when making modifications to plant, operations or equipment (including decommissioning). These arrangements are described through PD-012 Environmental Management **NRS Sites** and PRC 0103 BPM Methodology, at **NRS Dounreay**.

#### **4.3.5. Security**

The Security Assessment Principles for the Civil Nuclear Industry (SyAps) are delivered in an integrated way through the management system with their requirements being specified through PD-010 Management System, PD-015 Security Management **NRS Sites** and through MAN 0021 Security Manual at **NRS Dounreay**.

The requirements for Reliability, Resilience and Sustainability, Physical Protection Systems, Policing and Guarding and Workforce Trustworthiness are implemented through PD-015 Security Management and at Dounreay through MAN 0021 Security Manual.

Cyber Security and Information Assurance is met through PD-023 Knowledge and Information Management at **NRS Sites** and through MAN 0021 Security Manual at **NRS Dounreay**.

#### 4.3.6. Safeguards

The individual components of Schedule 2 of The Nuclear Safeguards (EU Exit) Regulations 2019 are met within NRS through PD-026 Waste Management Process at **NRS Sites** and at **NRS** Dounreay through

- STD 2014 Control of Nuclear Matter, including Fissile Material & Radioactive & Contaminated Items
- STD 2131 Accountancy and Control Plan

In addition, Accountancy Control Plans are in place that summarises the arrangements for the individual Material Balance Areas.

#### 4.3.7. Emergency Arrangements

As a responsible organisation and licensee, the Company maintains adequate capabilities, arrangements and infrastructure for responding to emergency incidents on any of its sites.

A robust management framework, detailed within its management systems, is available for the assessment, planning, preparation, delivery, communication and review of the Company's emergency arrangements.

Further details on emergency arrangements are provided through:

- PD-014 **Organisational Resilience, at NRS Sites**
- MAN 2011 Dounreay Emergency Manual at **NRS Dounreay**

### 4.4. Organisational Structure and Resources

#### 4.4.1. Organisational Capability

As a nuclear site licensee and holder of environmental permits, the Company clearly understands the nuclear safety, security and environmental management capability required to deliver its programme of work safely and effectively. The capability requirement is documented as part of the management system. This is primarily achieved through the production and maintenance of a Nuclear Safety, Security and Environmental Management Organisational Baseline ('Baseline'). Defined under PD-019 People Management **NRS Sites** and, PRC 0017 Management of Health, Safety, Security & Environment related Organisational Change and PRC 0011 Managing Competence for **NRS Dounreay**

The Company has a resource of staff at sites supported by those in central functions to provide the required engineering and technical capabilities and competences to run those sites safely. Key elements are:

- The Company has assessed the core business and identified the competences, in terms of skills and the resources to safely and compliantly deliver the core activities
- It is the responsibility of management to allocate work to groups and individuals who are suitably qualified and experienced to carry out that work
- Persons are formally appointed, as necessary, as: Duly Authorised Person (DAPs), Appointed Suitably Qualified Experienced Person (ASQEPs) and

Authority to Operate (ATO) and to meet the requirements of the Site Licence and EPR Permit and EA(S)R conditions and other regulatory requirements.

- The Company holds two Radioactive Waste Advisor Corporate Bodies, one for **NRS Sites**, and one for **NRS Dounreay**.
- The Company has a **Radiation Protection Advisor Corporate Body for NRS Sites, Radiation protection Advisors are appointed individually at NRS Dounreay**.
- The Company has arrangements in place to maintain control and supervision of its activities.
- In addition, there is sufficient qualified and experienced resource within the Company to act as the Design Authority, maintain the capability and provide an Intelligent Customer function.
- A Baseline structure and resource has been established. Any changes to the Baseline have been and will continue to be made in accordance with arrangements under Site Licence Condition 36, EPR and EA(S)R permit requirements.

#### **4.4.2. Core Capability**

Nuclear safety, security and environmental management in carrying out the core activities (Section 4.1.2), is achieved through 'core capability'. This is understood as the enduring ability to understand the hazards, safety cases and environmental permits in order to control activities such that they remain safe, secure and environmentally sound. This is achieved through:

- Governance
- **Independent challenge** /Independent Assurance
- Design Authority
- Intelligent Customer
- Suitably qualified and experienced staff

##### **Governance**

Governance concerns the command and control of safe, secure, environmentally sound delivery of the nuclear and environmental activities to defined standards which meet legal and regulatory requirements. Achieved through its organisation (see 4.3), and the provision of adequate processes and procedures (see 4.6).

##### **Internal Challenge/Independent Assurance**

A key aspect of the Company's governance arrangements is achieved through the provision of a healthy Internal Challenge/Independent Assurance function. Further details are provided through PD-016 at **NRS Sites**, MAN2030, PRC 0012, at **NRS Dounreay**

**Design Authority**

As a nuclear site licensee and permit holder, the Company understands and maintains the design intent of its plant and equipment and its safe, secure, environmentally sound operating envelope.

The Company Design Authority arrangements define the overall responsibility for, and the requisite knowledge, to maintain the design integrity and the overall basis for the safety, security, and environmental protection of its nuclear facilities throughout their full lifecycle.

PD-018 Engineering delivery defines the arrangements for Design Authority at **NRS Sites** (POL 2007 Engineering and MAN 0004 Engineering Manual at **NRS Dounreay**).

**Intelligent Customer**

The Company retains the capability to have a clear understanding and knowledge of any product or service being supplied by a service provider that could affect nuclear safety, security, or environmental management.

This capability demonstrates that as an organisation, the Company knows what is required, fully understands the needs for a contractor's services, specifies requirements, supervises the work, and technically reviews the output before, during and after implementation of any outsourced service, in order to confirm that the originally specified requirements have been met.

It is recognised that this Intelligent Customer (IC) capability is an attribute of the organisation and does not reside in a single individual. The presence of this function is identified by nominating certain core roles and appointed positions to form the IC for a specific subject area.

Further details on IC arrangements are provided in PD-018 Engineering delivery at **NRS Sites**, and PRC 0016 Methodology for Developing a Baseline at **NRS Dounreay**.

**Suitably qualified and experienced staff**

The Company's Human Resources programmes ensures that adequately skilled resources are available to meet the Baseline requirements. These processes ensure that the Company is able to recruit and maintain an appropriate workforce, ensuring that it has the appropriate skills, is adequately trained and demonstrably exhibits the necessary competence to carry out the range of activities as defined by the LTPs, safely, securely and environmentally responsibly.

Further detail on safety and environmental training and competence is provided in PD-020 learning and Development at **NRS Sites** and GN 2010 Training and PRC 0011 Managing Competence at **NRS Dounreay**.

**4.4.3. Control of Contractors**

The Company supplements its employees with contractors to perform work activities. Where contractors are embedded in the organisation, they have been included in the Baseline assessment process.

In using contractors, the Company recognises its absolute responsibility to meet its obligations under the nuclear site licence and to maintain adequate control of the site

and its contractors at all times through appropriate supervision and monitoring arrangements.

Contractors are selected based on their ability to meet the Company's safety requirements as well as its requirements for quality, relevant expertise and cost.

Contracted personnel are required to be suitably qualified and experienced for the tasks they are engaged to complete; following submission of satisfactory risk assessments, they work either to the Company's own procedures or to procedures proposed by the contractor and accepted by the Company.

Contractors are trained to respond appropriately to reasonably foreseeable emergencies. Where they have responsibilities under the Site Emergency Plan they are adequately trained. Contracts include specific call-out / stand-by arrangements where required.

Further details on control of contractors are provided within PD-006 Procurement, and PD-008 Control of work at **NRS Sites**, and MAN 0003 Commercial Services Manual, MAN 2003 Work Control Manual and PRC 0011 Managing Competence at **NRS Dounreay**

#### **4.4.4. Funding Of The Company**

The Company is funded by the NDA. The Company has to advise the NDA of the amount to be drawn within a reasonable timeframe and provide supporting information relating thereto.

Where the Company has reasonable cause to believe that Emergency Action is required and that there is insufficient time to process the relevant Change Proposal then the Company is entitled to proceed with the Emergency Action.

#### **4.4.5. Long Term Financial Liabilities**

The funding of the Company, including the activities and operation of the sites, is by the NDA. The funding of the liabilities associated with these sites is the responsibility of the NDA. Long term plans for the decommissioning of the sites have been developed and communicated to the Regulators. They are submitted to the NDA and routinely revised.

#### **4.4.6. Third Party Liability**

The Company will meet its strict liability, under the Nuclear Installations Act 1965 (as amended), for compensation of claims in line with The Nuclear Installations (Liability for Damage) Order 2016. The Company's insurance is arranged and managed by the NDA.

#### **4.4.7. Supply Chain**

The Procurement and Supply chain process PD-006 at **NRS Sites** and MAN 0003 - Commercial Services Manual at **NRS Dounreay**, defines the Company's procurement arrangements, including engagement with stakeholders across the company to ensure compliance requirements with respect to Safety, Security and the Environment are met, and any risk identified, managed and mitigated. S-481 Contractor General Requirements at **NRS Sites** defines a set of instructions which contractors must comply with when working on site.

## 4.5. Decision Making

The Company's decision-making is embodied in the processes within its management system. Governance arrangements set out above ensure that appropriate challenge is presented to all decisions in relation to nuclear safety, security and environmental management

Governance and decision-making processes in emergency situations are addressed by the emergency arrangements as referenced above.

### 4.5.1. Change Management

Whilst the need to change and continually improve is actively embraced and encouraged by the Company, it is recognised that within its industry, such change must be carefully considered and controlled, such that potential impacts to safety, security and environment are identified and appropriately mitigated.

The Company adopts **several** processes and arrangements to control change to **various** aspects of its organisation including structure, capability, safety cases, plant design, management system and program of work.

## 4.6. Management System

The arrangements that make up the management system are composed of two tiers:

- Tier one comprises of common documents that apply to all areas of the Company
- Tier two comprises documents that apply to specific areas of the Company.

There are essentially two separate management systems – one for the NRS Centre and NRS Sites, and one for NRS Dounreay.

Both systems implement quality, safety, health, environmental and security controls to meet the requirements of recognised national and international standards. Requirements of the key documents identified under section 3 are reviewed and the requirements allocated to sections of the management system for implementation and compliance with requirements. In this way requirements are delivered using common techniques. See PD-010 Management Systems at **NRS Sites** and MAN 2001 Management Systems Manual at **NRS Dounreay**.

The management systems, document and promulgate agreed ways of working to implement Company policies and deliver the objectives of the business. They **encompass** all aspects of the organisation, including culture, training and experience, they **apply** to all areas of the Company, and **are** binding on all personnel.

The management systems at Delivery Business level are supported by specific arrangements at site and facility level.

The Board defines the Company mission and policies, for implementation by the Executive. Stakeholder requirements and expectations are reflected in policies, objectives and targets, including in policies for health and safety, the environment and quality.

Objectives and targets are set at corporate level and disseminated through the LTP, improvement plans/projects and personal objectives.

The management system documents at Company-wide, **Delivery Business and site level** are published on Company/Site IT networks. Copies of management system documents are made available to approved external parties, including regulators, as and when required.

Compliance with key legislation at **NRS Sites** is demonstrated through compliance matrices that are embedded within the management system. Licence and Permit Condition Compliance Statements and Matrices are available such that the management system can be easily mapped to the requirements of these key pieces of legislation. For **NRS Sites compliance** matrices are referenced on a site-by-site basis within specific documents such as PD-010 Management System Process and S-500 Arrangements and Responsibilities for Compliance with the Nuclear Site Licence Conditions.

At **NRS Dounreay** compliance requirements are analysed and requirements implemented through STD 0052 Statutory (SHE) Identification, Implementation & Compliance Assessment. Relevant good practice, including the HSE publication 'Reducing Risk, Protecting People', has been considered in the production of management system arrangements to support keeping risks as low as reasonably practicable (ALARP). Where appropriate this is referenced in the relevant arrangement.

#### **4.7. Learning Organisation**

Learning from experience is promoted throughout the Company. The Company has arrangements for developing, sharing and using knowledge derived from experience within the organisation, the nuclear sector and wider industry to promote good practice. The Company seeks to openly engage with other operators from within and outside the nuclear industry so as to seek to ensure that it can make the most of the collective expertise and experience. The Company works to maintain a network of contacts and carries out peer reviews and 'peer assists' with a view toward ensuring that it does not become self-referencing in terms of safety, security and environmental standards. These are detailed in PD-016 Business Improvement for **NRS Sites** and PRC 2094 Learning from Experience at Dounreay at **NRS Dounreay**.

##### **4.7.1. Operational Experience Feedback and Learn**

**Operational** Experience Feedback and Learn (OEFL) arrangements are an integral part of management system arrangements. Arrangements are designed to 'Learn' from experience and to help achieve and sustain excellent safety, health and environmental performance.

The Company is committed to developing, sharing and using knowledge derived from OEFL in order to reduce accidents, improve its processes and more effectively control risks. Processes collate, review and then disseminate information for the benefit of the Company and its employees, tenants and contractors.

Dissemination of learned information is achieved through a number of mechanisms including 'Alerts' systems, safety sessions and specific campaigns.

Further detail relating to OEFL processes is available.

##### **4.7.2. Incident Management and Investigation**

The Company seeks to investigate all incidents on its sites through fostering a positive 'reporting culture'. Robust incident reporting, investigation and root cause analysis

arrangements enable the Company to identify appropriate corrective and preventative measures as well as to adopt relevant learning in order to continually improve performance and more effectively control risks.

Further detail is available through PD-016 Business Improvement at **NRS Sites** and PRC 0001 Reporting, Investigating and Learning at **NRS** Dounreay.

#### **4.7.3. Performance Monitoring, Indicators and Reporting**

Review of 'Safety' performance across the Company is achieved through a variety of processes from a corporate level down to individual reviews.

Formal assessment processes provide management with objective data on which to base decisions and actions. It is planned on a risk basis and is carried out as an integral part of site, project and plant management activities. Assessment is broken down into:

- Self-monitoring
- Independent Assessment

In addition, the Company has developed a suite of key 'Safety' indicators to monitor and measure its performance. Leading and lagging indicators have been identified against key themes.

The Company undertakes analysis of its 'Safety' performance via relevant governance fora.

#### **4.7.4. Continual Safety, Security, Environmental and Business Improvement**

The Company is committed to maintaining and continually improving 'Safety' performance management.

A wide variety of data is collected across the organisation from a number of sources including incident investigation, performance indicators, management system review, independent assessment and self-monitoring, as well as stakeholder feedback.

Themes and trends from this data are discerned such that rolling improvement programmes can be generated to ensure that the Company continually enhances its standards and performance.

A key aspect of continual improvement is the ongoing drive to enhance safety (inclusive of environmental and security) culture within the Company.

The Company maintains an ethos of targeting zero accidents, harm and loss and with the desire that the entire workforce should, 'return home safe every day'.

The Company monitors the safety culture of its organisation using the best available methods including surveys, focus groups and independent reviews. Improvements and initiatives are then identified, for inclusion in published improvement programmes in order that culture is continually enhanced.

#### **4.7.5. Communities of Practice**

The Company seeks to foster a 'learning organisation' culture by active participation in a number of industry-wide fora to share learning, identify industry 'good practice' and avoid self-referencing. These include:

- Safety Directors Forum and associated sub-groups

- Peer Review Programmes, Technical Support and Exchange Programmes run by the IAEA and other industry bodies
- TU Safety Representatives

## 5. REFERENCES

### 5.1. External Documents

Number	Title
NS-TAST-GD-072	Function and Content of a Safety Management Prospectus
	Magnox Decision Document, Defra, August 2006
	Reducing Risk, Protecting People: HSE Decision Making Process, 2001 HSE Books ISBN 0 7176 21510 (Only available from HSE web site)
	Radioactive Substances Regulation: Management Arrangements at Nuclear Sites (2010)
	The Licensing of Nuclear Installations (Only available from the ONR web site)
	Nuclear Safeguards (EU Exit) Regulations, 2019.

### 5.2. Company Wide Documents

Number	Title
M-010	Corporate Governance Framework
M-011	The Company Executive
M-006	Company Functional Manual
S-111	Company Policies

### 5.3. Delivery Business Documents

NRS Sites Documents		NRS Dounreay Documents	
Number	Title	Number	Title
M-001	NRS Sites Management and Governance Manual	MAN 2030	Management and Governance Manual
PD-001	Asset Management	STD 0038	Tenant Operations Control
PD-006	Procurement	MAN 0003	Commercial Services Manual
S-481	Contractor General Requirements		

NRS Sites Documents		NRS Dounreay Documents	
Number	Title	Number	Title
PD-008	Control of Work	MAN 2003	Work Control Manual
PD-010	Management System Process	MAN 2001	Management Systems Manual
S-500	Arrangements and Responsibilities for Compliance with the Nuclear Site Licence Conditions	STD 0052	Statutory (SHE) Identification, Implementation & Compliance Assessment
PD-014	Organisational Resilience Process	MAN 2011	Dounreay Emergency Manual
PD-012	Environmental Management	PRC 0103	BPM Methodology
PD-016	Business Improvement Process.	MAN 2030	Management and Governance Manual
		PRC 0012	Independent Challenge & Oversight – Assessment Activities
		PRC 2094	Learning from Experience
		PRC 0001	Reporting, Investigating and Learning
PD-018	Engineering Delivery Process	MAN 2021	Safety Case Manual
		POL 2007	Engineering
		MAN 0004	Engineering Manual
PD-015	Security Process	MAN 0021	Security Manual
PD-019	People Management	PRC 0017	Management of Health, Safety, Security & Environment related Organisational Change
		PRC 0011	Managing Competence
		PRC 0016	Methodology for Developing a Baseline for DSRL

NRS Sites Documents		NRS Dounreay Documents	
Number	Title	Number	Title
S-275	Working Safely- Our Standards and Expectations	STD 2111	Dounreay Professionalism Standards & Expectations
PD-020	Learning and Development.	PRC 0011	Managing Competence
S-172	Competency Directory	GN 2010	Training
PD-023	Knowledge and Information Management		
PD-026	Waste Management Process	STD 2014	Control of Nuclear Matter, including Fissile Material & Radioactive & Contaminated Items
		STD 2131	Accountancy and Control Plan
PD-027	Governance Process		

## 6. REVIEW/REVISION REGISTER

A review/change of this document was carried out as follows:

Date	Carried Out By	Amendments / Brief Reason
Issue 1 January 2011 (ML/M/Intro to SEMP)_	Ian Sleight	MxN (MN/M/Intro to SEMP) & MxS (MS/M/023) docs merged and references updated. Issued as M-Intro to SEMP and originals withdrawn.
Issue 1 February 2011 (M-023)	Ian Sleight	Document number changed from M-Intro to SEMP to M-023 as required by QMS integration work stream.  ML/M/Intro to SEMP Withdrawn  Text revised to remove 'Group' aspects and references revised in line with revised numbering requirements of QMS work stream.
Issue 2 April 2012	M Leverett	Document updated to remove reference to the Core Competence Standard, update the operational status of Dungeness, Oldbury and Wylfa, references to the former Magnox North and South removed, minor typographical errors corrected and references corrected.
Issue 3 February 2015	S Stapleton	Rewrite to support licensing of Harwell and Winfrith to the Company.  4.3 Para 3 inclusion of Closure Director

Date	Carried Out By	Amendments / Brief Reason
		<p>4.6 Para 3 Change in responsibility from Executive to Board</p> <p>5 Addition of separate Quality policy for Harwell Winfrith.</p>
Issue 4 July 2015	S Stapleton	Update to support changes to executive responsibilities and a programmed approach as described in MOC MSO/02/2015
Issue 5 June 2019	S Stapleton	Update to reflect revised M-001 format and content, and implementation of Common Company processes, references to M-019 now replaced by reference to appropriate PD
Issue 6 June 2022	J Widgery	Update to support licensing of Dounreay to the Company and issue of Licensing of Nuclear Installations November 2021.
Issue 7 March 2023	J Widgery	Issue 6 only formally issued to ONR as part of relicensing activities. Issue 7 reflects changes to Dounreay documents and application of Corporate Policies and issued to reflect Dounreay relicense to Magnox Ltd on 1 <sup>st</sup> April 23.
Issue 8 October 2024	S Stapleton	General Update to reflect Company name, organisational changes, management system documents and other changes

## APPROVAL SHEET

Approval		
<b>Title:</b> Introduction to the Safety, Security & Environment Management Prospectus		
<b>Document Number:</b> M-023	<b>Issue No:</b> 8	
<b>Company Area:</b> NRS		
<b>Document Type:</b> Manual		
<b>Parent Process:</b> PD-010		
<b>Author:</b> <b>S Stapleton</b>	Management systems	<b>Date:</b> <b>31/10/2024</b>
<b>Verifier:</b> <b>David Williams</b>	Head of EHSSQ NRS Sites /Process Owner	<b>Date:</b> <b>31/10/2024</b>
<b>Verifier:</b> <b>Jillian Widgery</b>	Head of EHSSQ – Governance & Future Mission	<b>Date:</b> <b>31/10/2024</b>
<b>Verifier:</b> <b>Mac MacGill,</b>	NRS Dounreay EHSS&Q Director	<b>Date:</b> <b>31/10/2024</b>
<b>Authoriser:</b> <b>Pam Duerden</b>	NRS EHSS&Q Director	<b>Date:</b> <b>31/10/2024</b>