

Manual

M-023

Issue 3

Introduction to the Safety & Environment Management Prospectus

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| Impact: Low | Implementation: Once Harwell and Winfrith are licenced to the Company | |
| Major rewrite to support licensing of Harwell and Winfrith to the Company. | | |

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1 INTRODUCTION

Magnox Ltd. company number 02264251 (The Company), is the licensee for the nuclear licensed sites at Berkeley; Bradwell; Chapelcross; Dungeness A; Harwell; Hinkley Point A; Hunterston A; Oldbury; Sizewell A; Trawsfynydd; Winfrith and Wylfa¹.

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

As a Site Licence Company (SLC), the Company's shares are held by a Parent Body Organisation (PBO), in accordance with the operating model devised by the Nuclear Decommissioning Authority (NDA) under the Energy Act 2005. The shares are held by the PBO for the duration of the PBO's contract with the NDA. The PBO may change in the future; depending on the direction given by the NDA, the Company will remain the SLC until such time as the Government may change the arrangements

As it is the SLC, and not the PBO, that is awarded nuclear licences and environmental permits, the Company organisation has been structured to meet all regulatory requirements on a stand-alone basis whilst under the PBO.

Until such time as Harwell and Winfrith Sites are brought under common arrangements, extant Harwell/Winfrith arrangements will continue to apply for the management of these sites. Where this is the case these are identified either in the text or where a document is quoted the equivalent document in section 5 (References) and in the Harwell and Winfrith Site Manual MAN-0001.

2 PURPOSE

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

The Company does not maintain a separate SEMP document; rather it adopts a modular approach the elements of which are incorporated in its management system. In totality the SEMP 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 'Safety'.

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

This SEMP 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 EHSS&S performance.

The environment health and safety management arrangements described through 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.

¹ Maentwrog hydroelectric site is managed by Wylfa; this site does not hold a site licence or RSA Authorisations / EPR Permits and the management arrangements are essentially a subset of the Wylfa arrangements.

With regard to the justification of the practices carried out on Company sites and the Euratom Basic Safety Standards Directive (EBSSD) the appropriate Ministers have indicated in their Decision Document that they are satisfied that the generation of electricity using Magnox reactors is an existing class of practice under Article 6(1) of (EBSSD).

NOTE: Justification for Magnox Reactors in Scotland is contained in paragraphs 135, 148 and 198 of the decision document. In addition they are satisfied that this class of practice would continue to be justified in accordance with Article 6(2) of (EBSSD).

3 SCOPE

The SEMP for the Company comprises:

- The Introduction (this document).
- The Company Manual M-001
- The Environment, Health and Safety Policy POL-008
- The Quality Policy (see Section 5)
- Arrangements for the Management of Environment, Health and Safety M-019
- The Function Manuals
- The Site Manuals

The SEMP takes into account relevant guidance provided by regulators such as “The Licensing of Nuclear Installations” Published by the HSE, ONR Safety Technical Assessment Guide NS-TAST-GD-072 and guidance issued by the Environment Agency in the Radioactive Substances Regulation: Management Arrangements at Nuclear Sites. This introduction 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 Radioactive Substances Act 1993, the Environmental Permitting (England and Wales) Regulations 2010 (EPR), the Pollution Prevention and Control Act 1999 and other relevant environmental legislation.

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

4 DETAILS

The sections below provide summary information on relevant guidance 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 and authorisations.

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 currently undergoing decommissioning.

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.

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 de-fuelled 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 Magnox gas cooled reactors are currently undergoing defueling as part of its decommissioning programme.

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 and has two Magnox gas cooled reactors. It is planned to cease generation at the end of 2015 and it will then commence defueling followed by 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 RSA Authorisations / EPR Permits and the management arrangements are essentially a subset of the Wylfa arrangements.

4.1.2 Core Activities

The Company programme of work is defined by its LifeTime Plans (LTPs). All activities carried out are contained within the LTPs. A significant subset of the LTPs relates to nuclear

or environmental activities and therefore in order 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
- Defueling operations
- '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 waste (ILW/LLW) storage and disposal
- Active liquid effluent treatment
- Site remediation and de-licensing
- Estate and tenant management
- Control and Direction of Activities

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

The management systems in their entirety govern activities at the Company. The principal management system documents that control and direct activities are the Company Manual M-001, Arrangements for the Management of Environment, Health & Safety M-019, Function Manuals and Site Manuals/OQAP's. Further applicable arrangements are referenced from these documents.

4.1.3 Site Tenure

The freehold of the sites and the ownership of buildings and equipment are held by the NDA (with the exception of Harwell²). Property leases are in place to ensure the required rights of access, at all times, to meet the responsibilities under the Nuclear Installations Act and Site Licence Conditions.

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.

4.1.4 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 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 at the site;
- the Company Mission and NDA strategy

² The freehold of Harwell is owned by the United Kingdom Atomic Energy Authority (UKAEA) and leased back to NDA

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 M-019.

4.2 Leadership

The Board and Executive provide overall leadership for the Company and have defined Policies and Mission to direct the Company. M-001 details the role of the Board and Executive.

4.2.1 Policies and Mission

The Environment, Health and Safety Policies are of critical importance to describing the requirements for focusing the organisation on achieving and sustaining high standards of safety and environmental performance. These and other Policies established by the Board along with the Company Mission are listed in M-001.

4.2.2 Values & Behaviours

The Company has developed a set of 'Values and Behaviours' in order to help the workforce understand what is expected from each employee. These are defined within the Company Management System and referenced within M-019.

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.

4.3 Governance Of Nuclear Safety & Environmental Management

The Company governs nuclear safety and environmental management through its organisation defined within M-001, 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 'Safety'.

The Executive has delegated responsibility from the Board, for operational management of the Company. Non-executive advisors and other support staff may be utilised to augment the senior management team.

At each of the Company's sites, a Site Director (or 'Closure Director' at Harwell and Winfrith) is identified with accountability to the Executive for providing effective leadership, governance and oversight for the safe, secure and environmentally sound delivery of the required programme of work. Site Directors act as 'Agents of the Licensee' and are responsible for ensuring compliance with regulations, legislation and all Company standards, processes, values and other requirements.

Responsible Managers are identified in Function and Site manuals 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. Responsible Managers include Duly Authorised Persons (DAPs) and if appropriate, Authority to Operate (ATO) Holders for nuclear safety significant facilities.

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 Regulation, Inspection and Independent Assurance

A key aspect of the Company's governance arrangements for nuclear safety and environmental protection is the formal system for independent internal challenge. Independent Assurance, Inspection and Internal Regulation is provided to the Company through various means, as detailed within M-019.

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 and environmental protection for the Company is 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 independent challenge on nuclear safety and environmental management is through the Nuclear Safety Committees (NSC) and the Nuclear Safety and Environment Council (NSEC).

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 in M-019.

4.3.4 Best Available Techniques

The Company, in compliance with its permit conditions, adopts 'Best Available Techniques' (BAT) in order to consider, assess and minimise impacts on the environment when making modifications to plant, operations or equipment (including decommissioning).

4.3.5 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 within M-019.

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 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 and Environmental Management Organisational Baseline ('Baseline').

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), Authority to Operate

(ATO) and Radioactive Waste Advisors (RWAs) to meet the requirements of the Site Licence and EPR Permit / RSA Authorisation conditions and other regulatory requirements

- 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, and maintain the capability of the Design Authority and provide an Intelligent Customer function
- A Baseline structure and resource has been established for each site and central function. Any changes to these Baseline structures have been and will continue to be made in accordance with arrangements under Site Licence Condition 36 and RSA Authorisation / EPR permit requirements

4.4.2 Core Capability

Nuclear safety and environmental management in carrying out the core activities (Section 4.13) 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 and environmentally sound. This is achieved through:

- Governance
- Internal Regulation/Independent Assurance
- Design Authority
- Intelligent Customer
- Suitably qualified and experienced staff

a) Governance

Governance concerns the command and control of safe, 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.

b) Internal Regulation/Independent Assurance

A key aspect of the Company's governance arrangements is achieved through the provision of a healthy Internal Regulation/Independent Assurance function. Further details are referenced in M-019

c) 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, 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/environmental protection of its nuclear facilities throughout their full lifecycle.

M-001 provides further detail.

d) 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 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 recognized 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 M-019

e) **Suitably qualified and experienced staff**

The Company's Human Resources programme 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 M-019.

4.4.3 Parent Body Organisation (PBO) Secondees

The Company organisational structure includes various positions in the Executive, senior management team and below that are filled by personnel seconded from the PBO in accordance with the NDA operating model for SLCs.

PBO secondees are subject to formal agreements ('Terms of Secondment') which require them to act as Company employees and in the interests of the Company, accountable to the Board for the duration of their secondment. Additionally, the terms of the contract require the written consent of the NDA prior to the withdrawal of any seconded personnel from the Company by the PBO. It is recognized, however, that this creates a potential capability vulnerability if the PBO organisation were to completely or partially withdraw its support.

For this reason, a determination of core roles that are filled by PBO secondees has been undertaken to ensure that appropriate skills and knowledge remain within the SLC team. The design of the organisational structure for the Company ensures that the SLC includes, without consideration of PBO secondees:

- Responsible Managers who are essential to maintain compliance with Licence Conditions
- Personnel necessary to preserve IC and Design Authority capability
- Personnel who have unique and essential specific site experience or knowledge
- Key safety personnel with nuclear safety, security, environmental protection, radiological protection, safety case and criticality assessment qualifications and experience to ensure continued safe operation.

This forms the basis of a 'continuity strategy' that has been developed and maintained to mitigate the vulnerability associated with PBO secondees.

4.4.4 Control of Contractors

The Company will supplement 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 on the basis of their ability to meet the Companies safety requirements as well as its requirements of 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 M-019.

4.4.5 Funding Of The Company

The Company is funded through a Target Cost and Fee Incentive contract with 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.

4.4.6 Long Term Financial Liabilities

The funding of the Company, including the activities and operation of the sites, is through contractual arrangements with 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 agreed with the Regulators. They are submitted to the NDA and routinely revised.

4.4.7 Third party Liability

The Company will meet its strict liability, under the Nuclear Installations Act, for compensation of claims up to 175 million Special Drawing Rights of the International Monetary Fund (SDRs) by means of an insurance policy. Above 175 million SDRs and up to 300 million SDRs, funding will be provided by the Government, from a pool contributed to by the signatories of the Brussels Supplementary International Convention on Third Party Liability in the Field of Nuclear Energy. If the aggregate of claims from one occurrence amounts to a sum more than 300 million SDRs, further claims established "shall be satisfied by the appropriate authority to such extent and out of funds provided by such means as Parliament may determine".

4.5 Decision Making

The Company's decision making processes are 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 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 environment, such change must be carefully considered and controlled, such that potential impacts to safety and environment are identified and appropriately mitigated.

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

4.6 Management System

The Company operates an integrated management system with quality, safety, health, environmental and security controls in place to meet the requirements of recognised national and international standards.

The Company management system documents and promulgates agreed ways of working to implement Company policies and deliver the objectives of the business. It encompasses all aspects of the organisation, including culture, training and experience, applies to all areas of the Company, and is binding on all personnel and secondees. The management system is defined at corporate level with supporting specific arrangements at site and local 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 and the environment.

Objectives and targets are set at corporate level and disseminated through the LTP (through Performance Based Incentives (PBIs), milestones, metrics and deliverables), improvement plans/projects and personal objectives.

The management system documents at Company-wide and site level are published on the 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 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. Compliance matrices are referenced on a site by site basis within specific documents such as MCP-001 Arrangements and Responsibilities for Compliance with the Nuclear Site Licence Conditions.

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 and environmental standards.

4.7.1 Operational Experience Feedback and Learn

Operating 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. Arrangements explain the principles and guidance laid down in IAEA Safety Standard NS-G-2.11 "A System for the Feedback of Experience From Events in Nuclear Installations".

The Company is committed to develop, share and use 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 in M-019.

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 provided in M-019.

4.7.3 Performance Monitoring, SPIs 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 in accordance with guidance set out in ONR Instruction: "ONR Inspection and Use of Licensee Safety Performance Indicators (SPIs)"

The Company undertakes analysis of its 'Safety' performance on a monthly basis. Monthly reports are presented to the Executive, identifying general performance data, areas of good performance as well as issues of concern. This provides the Executive with appropriate management information as an aid to decision making.

4.7.4 Continual Safety, 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 safety 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, WANO and other industry bodies
- EHSSQ 'Communities of Practice'
- TU Safety Representatives Fora

5 REFERENCES

| Number | Title |
|---------------------------|--|
| <i>External Documents</i> | |
| NS-TAST-GD-072 | Function and Content of a safety management Prospectus |
| | Council Directive 96/29/Euratom, The Basic Safety Standards Directive |
| | 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 (2009) |

| Number | Title |
|--|---|
| | The Licensing of Nuclear Installations (Only available from the ONR web site) |
| <i>Company Documents</i> | |
| M-001 | Company Manual |
| M-019 | Arrangements for the Management of Environment, Health and Safety |
| POL-008 | Environment, Health and Safety Policy |
| POL-014 (excluding Harwell and Winfrith) | Quality Policy |
| POL0016 (Harwell and Winfrith only) | Quality |
| <i>Function Manuals:</i> | |
| M-033 | EHSS&Q Function Manual |
| M-034 | Business Function Manual |
| M-035 | Executive Support Function Manual |
| M-036 | Operational resilience Function Manual |
| M-037 | Engineering Function Manual |
| M-038 | CNO Support Function Manual |
| M-039 | Strategic Projects Function Manual |
| M-040 | Commercial Function Manual |
| M-041 | HR. Function Manual |
| M-042 | Asset Management Function Manual |
| M-043 | Integration Management |
| Site Manuals | |
| OQAP | Bradwell |
| BNLS-SM-OQAP | Berkeley |
| OQAP 01 | Chapelcross |
| OQAP DD | Dungerness A |
| MAN0001 | Harwell and Winfrith |
| HINA/OQAP | Hinkley A |
| HNA/DQAP | Hunterston A |
| OLD-OQAP | Oldbury |
| SIZA OQAP | Sizewell A |
| M-032 | Trawsfynydd |
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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 Sleigh | 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 Sleigh | 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. |
| February 2015 | S Stapleton | Rewrite to support licensing of Harwell and Winfrith to the Company. 4.3 Para 3 inclusion of Closure Director 4.6 Para 3 Change in responsibility from Executive to Board 5 Addition of separate Quality policy for Harwell Winfrith. |

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