



Nuclear Generation Limited

Integrated Company Practice

Environmental Management and Compliance

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| Revision | Amendment | Impact level | Date |
|----------|---|--------------|---------------|
| 011 | 3 Yearly periodic review. Updated to provide an overview of the environmental management system and clarify interrelations with other company processes | Moderate | February 2017 |

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1 Purpose

1.1 Purpose of Document

This document describes the Environmental Management System (EMS) within EDF Energy Nuclear Generation Ltd (NGL), as outlined in the NGL Management System Manual (Reference 1). Compliance with the arrangements within this Integrated Company Practice (ICP) will ensure that the Company Environmental Policy (Reference 2) is effectively implemented within NGL.

Note that the Environment Process¹ implemented in isolation does not deliver the NGL EMS, but the Environment Process combined with the other company processes (refer to NGL Management System Manual (Reference 1)) provide the building blocks which define the EMS i.e. the EMS is embedded within company arrangements.

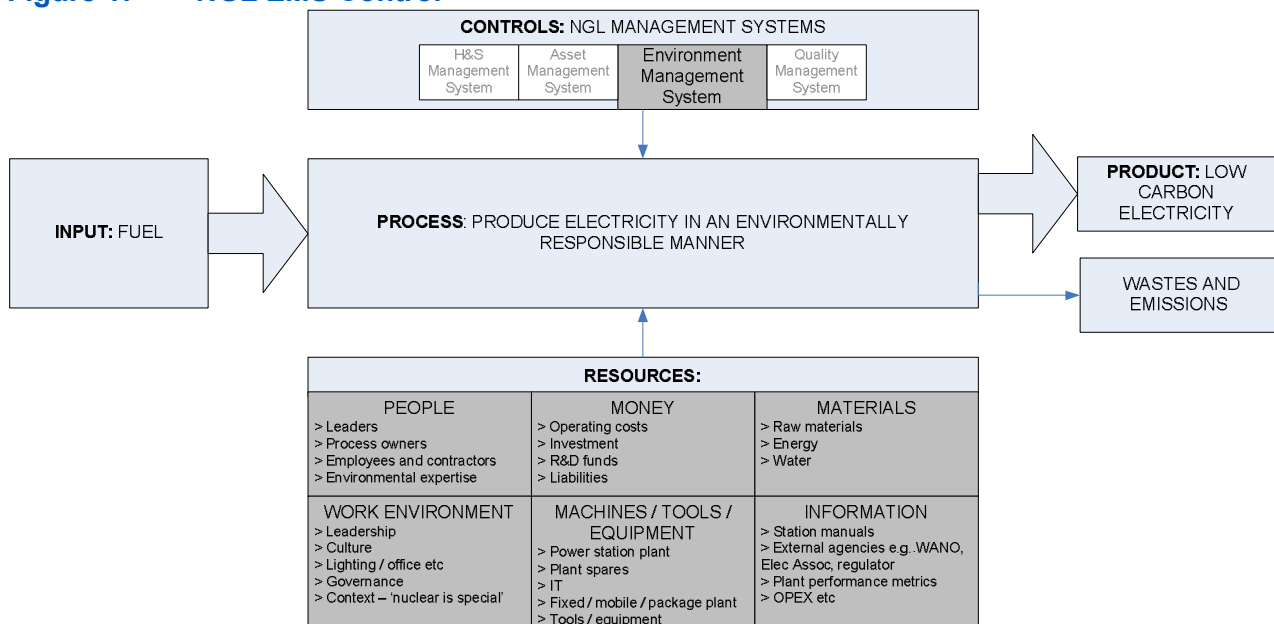
This ICP describes the NGL EMS arrangements, defines those which are environment specific processes and also identifies the key interfaces with other company processes which are critical for ensuring successful environmental management. Appendix A summarises how the individual processes provide key elements of the EMS; appendix B identifies which NGL arrangements support each section of the EMS. NGL Specification ‘Cross References Between the Management System Manual and External Standards’ (Reference 3) identifies how the management system delivers the requirements of BS EN ISO14001:2015 (Reference 4).

These management arrangements form part of the compliance arrangements for environmental permits, Nuclear Site Licence conditions 32, 33 and 34 and non-permitted environmental legislation. These specifications must not be altered without first consulting with the Compliance Arrangement Owners and Independent Nuclear Assessment (INA).

1.2 Purpose of the NGL Environment Management System

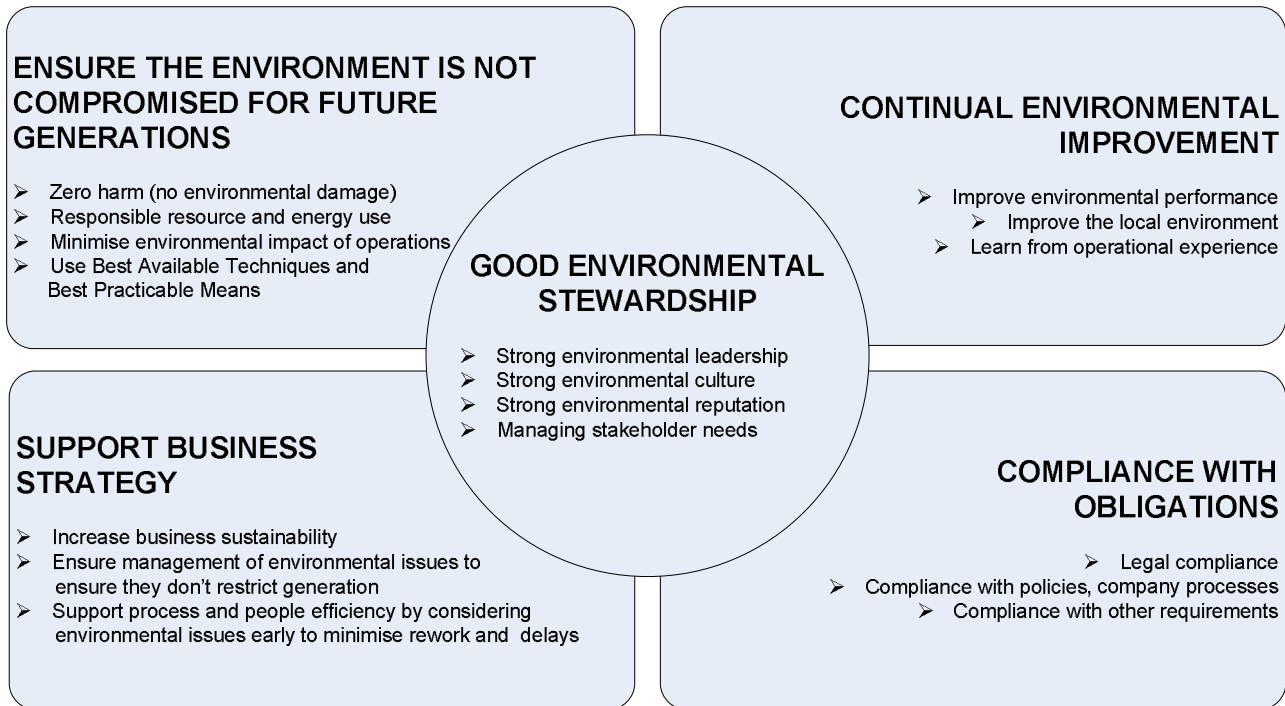
In line with our Better Energy Ambitions the purpose of the EMS is to provide NGL’s control and assurance that our product ‘low carbon electricity’ is produced in an environmentally responsible manner (Figure 1). Figure 2 illustrates what being ‘environmentally responsible’ means within NGL.

Figure 1: NGL EMS Control



¹ Note that the specific elements which form the environment process are summarised within Appendix A.

Figure 2: Intended outcome of the NGL EMS



2 Scope

2.1 Scope of the NGL Environment Management System

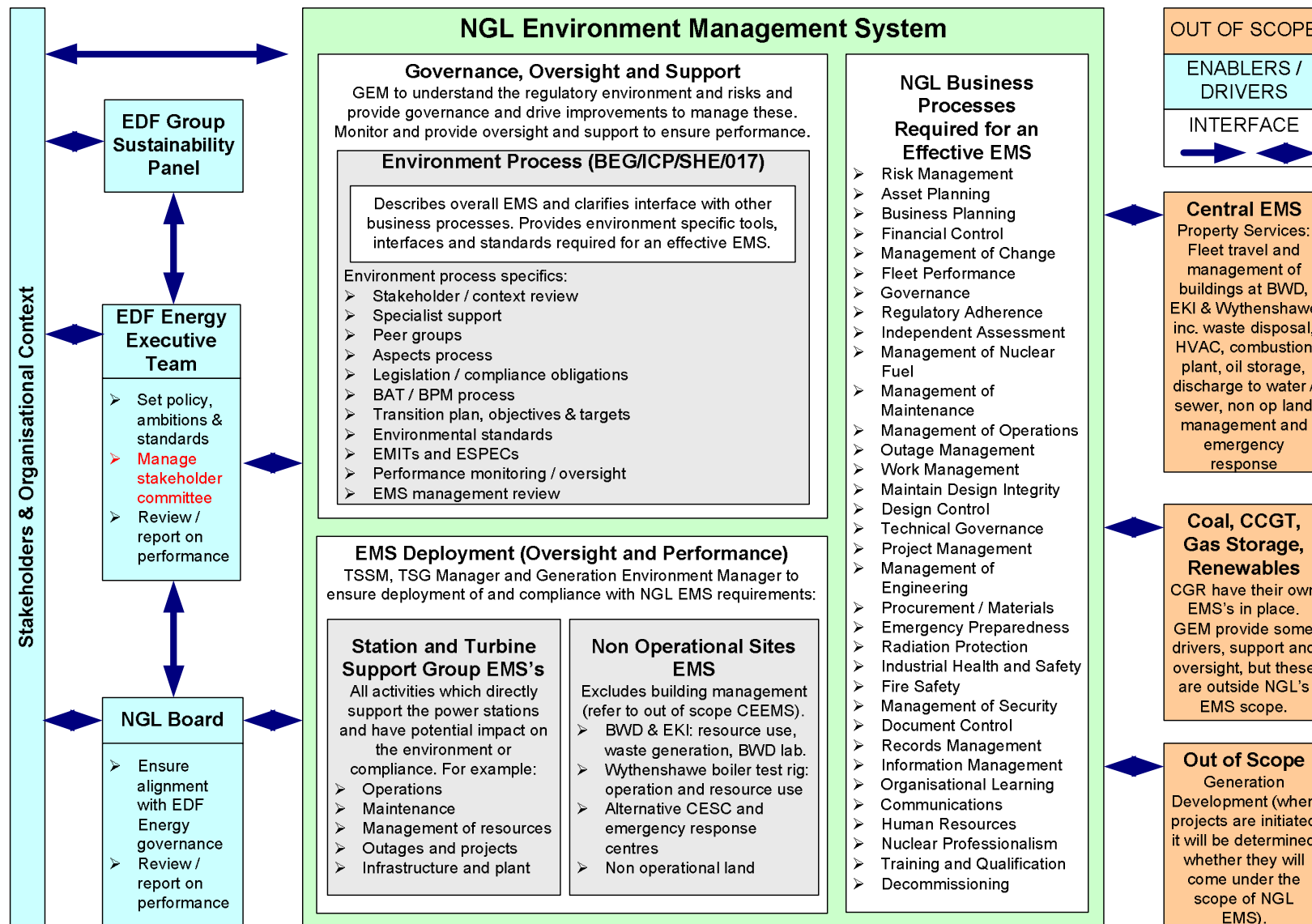
The scope of the NGL EMS covers all activities, plant, land and buildings on NGL operational sites (i.e. Nuclear Power Stations), activities which directly support them at other locations² and NGL landholdings surrounding these locations. It applies to all NGL employees and contractors working on NGL's behalf and applies throughout the lifecycle of operations (i.e. from design, construction, through operation to decommissioning). Refer to figure 3 which shows the scope, organisation and key drivers and interfaces for the NGL EMS.

2.2 Internal controls

Internal Controls for this process are identified in Appendix C.

² For example this includes - Barnwood, East Kilbride, Wythenshawe, District Survey Laboratories, Emergency Response Centres and the Alternative CESC in Bristol

Figure 3: Scope and organisation of the NGL EMS



3 Responsibilities

3.1 EDF Energy NGL Board

- Set NGL strategic direction and ensure compliance with the company environment policy (Section 4.2.1)
- Overriding accountability for legal compliance (Section 4.2.1)

3.2 Safety and Assurance Director

- Co-ordinate development and implementation, assessment and improvement of the EMS (Section 4.2.1)

3.3 Generation SODT

- Monitor delivery of strategic environmental objectives and plan action in event of deviation (Section 4.4.3)
- Undertake the Fleet Environment Management Review (Section 4.8.7)

3.4 Generation Environment Manager

- Maintain an assessment of organisational context and stakeholders relevant to the EMS and ensure any issues are addressed (Section 4.1.1)
- Define, establish and maintain an Environmental Management System (Section 4.1.2)
- NGRL Environment Process Owner (Section 4.2.3)
- Provide resource to establish fleet governance, provide oversight, support and ensure high performance across NGL (Section 4.2.3)
- Provide resource and ensure implementation of the non operational site EMS (Sections 4.2.3 and 4.6.1)
- Ensure ESGH peer group sponsor and chair are appointed and that the group delivers its purpose (Section 4.2.4)
- Establish and maintain environmental risk processes for context / stakeholders, aspects, compliance obligations and BAT / BPM (Section 4.3.2)
- Provide input into setting NGL strategic environmental objectives and improvement targets (Section 4.4.2)
- Develop fleet 5 year environmental transition plan with the ESGH peer group and monitor progress (Sections 4.4.2 and 4.4.3)
- Establish GEM activities to deliver the 5 year transition plan in business and work plans and monitor delivery (Sections 4.4.2 and 4.4.3)
- Sponsor the CGR environmental peer group and nominate a chair (Section 4.5.5)
- Provide arrangements to establish governance of environmental management (Section 4.6.1)
- Identify environmental controls required in other processes (Section 4.6.1)

- Conduct functional oversight of environmental performance to monitor the effectiveness of the EMS and ensure the EMS delivers the intended outcome (Section 4.8).
- Manage the relationship with external regulatory stakeholders (Section 4.5)

3.5 All Process Owners

- Ensure processes continue to provide support to the EMS and include the environmental controls as defined in Appendix A.

3.6 Technical Safety and Support Manager (at Stations) and TSG Manager

- Station / TSG Environment Process Owner (Section 4.2.3)
- Ensure provision of resource to establish local compliance arrangements, provide oversight, support and ensure required environmental performance (Sections 4.2.3 and 4.6.1)
- Embed activities required to assist in delivering the 5 year environment transition plan in business plans (Sections 4.4.2)

3.7 Station SODT / TSG Manager

- Monitor delivery of station business and improvement plans (Section 4.4.3)

3.8 Environmental Safety Group Head (at Stations)

- ESGH peer group member (Section 4.2.3)
- Embed activities required to assist in delivering the 5 year transition plan in ESG work plans (Sections 4.4.2)
- Establish local compliance arrangements, provide oversight, support and ensure required performance (Sections 4.2.3 and 4.6.1)

3.9 Station / TSG Environmental Strategy Review Group (or equivalent see Appendix F)

- Establish environmental objectives and targets and monitor delivery (Sections 4.4.2 and 4.4.3)
- Monitor delivery of actions required to support the fleet 5 year environment transition plan (Section 4.4.3)
- Undertake the environment management review (Section 4.8.8)

3.10 Environmental Safety Group Head Peer Group Chair

- Ensure the ESGH peer group delivers its purpose (Section 4.2.4)
- Agree sponsors and terms of reference for any supporting fleet environmental peer groups (Section 4.2.4)
- Nominate chair for the ECC peer group (Section 4.2.5)
- Ensure the group develops the 5 year transition plan with the Generation Environment Manager (Section 4.4.2)
- Embed activities required to assist in delivering the 5 year transition plan in peer group improvement plans (Sections 4.4.2)

- Monitor delivery of the peer group improvement plan (Section 4.4.3)

3.11 Environmental Compliance Co-ordinators Peer Group Chair

- Ensure the ECC peer group delivers its purpose (Section 4.2.5)
- Embed activities required to assist in delivering the 5 year transition plan in peer group improvement plans (Sections 4.4.2)
- Monitor delivery of the peer group improvement plan (Section 4.4.3)

3.12 NGL Environmental Peer Group Chairs

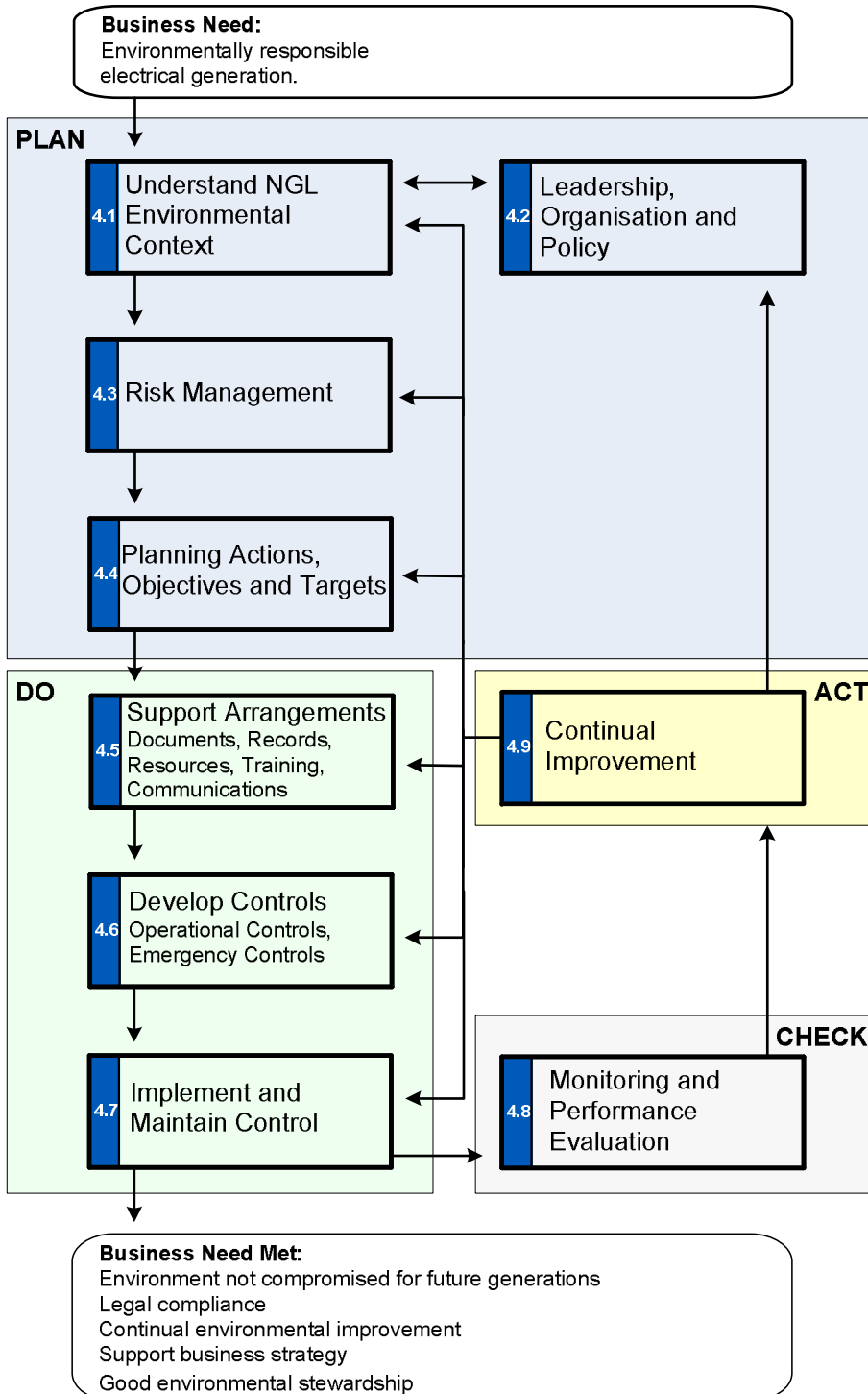
- Embed activities required to assist in delivering the 5 year transition plan in peer group improvement plans (Sections 4.4.2)
- Monitor delivery of the peer group improvement plan (Section 4.4.3)

3.13 Coal Gas Renewables Peer Group Chair

- Ensure the group operates as per purpose (Section 4.5.5.)

4 Practice

Figure 4 Process Flow Chart



| | Action | Responsibility |
|---|---|---|
| <p>4.1 Context of the Organisation</p> | <p style="text-align: center;">4.1</p> <p style="text-align: center;">Understanding NGL Environmental Context</p> | |
| <p>4.1.1</p> | <p>Organisational Context and Stakeholders</p> <p>NGL has determined the organisational context, key stakeholders, their needs and expectations and how they will be addressed within the Management System Manual (Reference 1) and the Governance Process (Reference 5).</p> <p>Undertake and maintain an assessment of the organisational context and stakeholders relevant to the EMS (Reference 6). This assessment shall identify any specific issues and interests which have potential to impact on effectiveness or output from the EMS and any potential risks arising. Any risks shall be addressed as per Section 4.3.</p> | <p>As per process</p> <p>Generation Environment Manager</p> |
| <p>4.1.2</p> | <p>Define an EMS</p> <p>Establish and maintain the arrangements and required tools for an effective EMS appropriate to the scope, intended outcome and the EDF Energy Environment Policy.</p> | <p>Generation Environment Manager</p> |
| <p>4.2 Leadership, Organisation and Policy</p> | <p style="text-align: center;">4.2</p> <p style="text-align: center;">Leadership, Organisation and Policy</p> | |
| <p>4.2.1</p> | <p>Leadership</p> <p>The EDF Energy Nuclear Generation Limited Board (NGLB) has collective responsibility for directing the affairs of NG consistent with the relevant EDF Energy policies and strategies. They are responsible for setting the NGL strategic direction and have ultimate accountability for legal compliance as per Management System Manual (Reference 1) and Governance Process (Reference 5). The Safety and Assurance Director is responsible for co-ordinating development and implementation of the EMS and its assessment and improvement (Reference 1).</p> | <p>As per process</p> |
| <p>4.2.2</p> | <p>Environmental Policy</p> <p>The EDF Energy Executive sets the EDF Energy environmental policy (Reference 2). The policy sets out the Company’s vision, values, standards and expectations and is applicable to NGL. The EMS arrangements implement the Environmental Policy.</p> | <p>Information</p> |

| | Action | Responsibility |
|-------|--|---|
| 4.2.3 | <p>Organisation, Roles, Responsibilities and Authorities</p> <p>Senior Management: The organisational set-up together with senior management roles, responsibilities, accountability and authority for the Environmental Management Process are specified in the Management System Manual (Reference 1). This assigns environment process owners as follows:</p> <ul style="list-style-type: none"> • Process Owner – Generation Environment Manager • Station Process Owner – Technical Safety Support Manager • Peer Group Member – Environmental Safety Group Head | Information |
| | <p>All Staff: Environmental protection and control is the responsibility of all staff. All individuals (not just those in environmental specialist roles) are therefore key to delivering an effective EMS. Appendix A summarises how the NGRL processes support or interface with the EMS – i.e. this summarises how environmental control and protection is embedded throughout the company.</p> | All Staff |
| | <p>Process Owners: Ensure all controls and responsibilities required to implement and support the EMS as per Appendix A are embedded in their process.</p> | Process Owners |
| | <p>Staff in Environmental Specialist Roles: Environmental support functions are established to ensure availability of appropriate Suitably Qualified and Experienced Personnel (SQEP) to provide guidance, support and advice.</p> | Information |
| | <p>Ensure that Generation Environment Management (GEM) provides resource to establish fleet governance, provide oversight, support, advice and ensure high performance across NGL. GEM Management Manual (Reference 7) shall document the process for delivering these requirements</p> | Generation Environment Manager |
| | <p>Ensure that the Environmental Safety Group (ESG) at their station provides resource to establish local compliance arrangements, provide oversight, support, advice and ensure required environmental performance at their station.</p> | TSSM TSG Manager |
| | <p>Provide resource to establish local compliance arrangements, provide oversight, support, advice and ensure required environmental performance within TSG and for the non-operational sites EMS.</p> | Generation Environment Manager TSG Manager |
| | <p>Where appropriate nominate an environmental lead for the process or group to raise awareness of environmental issues and controls and to provide a primary interface with GEM at Barnwood or station ESG.</p> | Process Owners and Line Managers |

| | Action | Responsibility |
|---|--|--|
| <p>4.2.4</p> | <p>Environmental Peer Groups</p> <p>Assign a TSSM as Environmental Safety Group Head (ESGH) Peer Group Sponsor, appoint a chair and ensure the group delivers its purpose, which is:</p> <ul style="list-style-type: none"> • To support a fleet approach to environmental management. • To ensure company compliance with relevant EU and UK legislation; • Agreement of targets in support of the environmental five year transition plan; • To share OPEX in a timely manner to reduce environmental events; • To share and replicate best practice to underpin sustainable environmental performance; • To influence improvements in company environmental performance; and • To set direction and accountability for sub-groups. <p>The ESGH Peer Group shall sponsor and agree Terms of Reference for any additional fleet environmental peer groups which are required to ensure effective delivery of the EMS. As a minimum this shall include:</p> <ul style="list-style-type: none"> • Environmental Compliance Co-ordinators (ECC) Peer Group (Section 4.2.5) • Operational Radioactive Waste Group (ORWG) (Reference 8) • Discharges and District Survey (DADS) Peer Group (Reference 9) <p>Peer groups with a primary environmental focus are summarised in Appendix D.</p> | <p>Generation Environment Manager</p> <p>ESGH Peer Group Chair</p> |
| <p>4.2.5</p> | <p>Nominate a chair for the Environmental Compliance Co-ordinator (ECC) Peer Group and ensure the group delivers its purpose, which is to:</p> <ul style="list-style-type: none"> • Share OPEX in a timely manner to reduce environmental events; • Communicate relevant and emergent environmental issues; • Provide support on environmental matters; and • Provide challenge on environmental matters. <p>The ECC Peer Group Chair shall ensure the group convenes regularly and delivers the purpose above (to be quorate at least three station site ECC's must be in attendance).</p> | <p>ESGH Peer Group Chair</p> <p>ECC Peer Group Chair</p> |
| <p>4.3 Environmental Risk Management</p> | | <div style="border: 2px solid black; padding: 5px; text-align: center;"> <p>4.3</p> <p>Risk Management</p> </div> |
| <p>4.3.1</p> | <p>Environmental Risk and Opportunities Management Approach</p> <p>Risks and opportunities which may impact on achieving the intended outcome of the EMS and delivery of the environmental policy are identified and assessed from a number of sources as identified in Appendices A and B. Understanding these risks is key to planning an effective EMS with appropriate controls and to driving improvements. Key risk processes are summarised below.</p> | <p>Information</p> |

| | Action | Responsibility |
|-------|---|--------------------------------|
| | Establish and maintain processes and tools and provide support and advice for the risk assessment processes identified in Appendix A (summarised below). | Process Owners |
| 4.3.2 | <p>Establish and maintain the following environment risk assessment processes:</p> <ul style="list-style-type: none"> • Context of the organisation: Assessment of organisation context and stakeholders (Section 4.1) shall identify risks that may arise as a result and confirm appropriate controls are in place (Reference 6). These shall be reviewed 3 yearly to ensure they remain effective. • Environmental Aspects: (Reference 10): this process shall identify and assess the key risks relating to the main systems, plant and activities and provide an overview of risks at each site and collectively across the organisation. • Compliance obligations (Reference 11): this process shall identify and assess applicable compliance obligations and ensure the business is informed of requirements. Compliance obligations include any legal or other requirements which NGL has to comply with and those which we choose to comply with (for example contracts, codes of practice, industry standards, EDF Energy standards and any obligations arising from needs of stakeholders (Section 4.1)). Non-compliance with these would result in risks to the business or environment. • Best Practicable Means/Best Available Techniques (Reference 12): this process shall ensure that relevant operational and radioactive waste management activities: <ul style="list-style-type: none"> – Use BAT / BPM (i.e. optimised techniques) based on a systematic consideration of potential alternatives, including consideration of health, safety, the environment, waste prevention, minimisation and disposal and other likely costs and benefits for the whole lifecycle of the waste. – Ensure that all ionising radiation exposure to members of the public shall be kept as low as reasonably achievable (ALARA), economic and social factors being taken into account. | Generation Environment Manager |
| 4.3.3 | <p>Risk Management, Asset Management and Business Planning Processes:</p> <ul style="list-style-type: none"> • NGL Risk Log (NGRL): The Aspects Process (Reference 10) will determine which significant risks should feed into the NGRL (formerly BERL) (Reference 13) for assessment. The risk log is used for significant issues which may impact on nuclear, radioactive, industrial and environmental safety and delivery of the business imperatives. The Asset Management Process (Reference 14) interfaces with this to prioritise and manage the risks. | As per process |
| 4.3.4 | <p>Work Prioritisation and Management:</p> <ul style="list-style-type: none"> • Work management: Routine and emergent work at nuclear power stations is planned using the On Line Work Management Process (Reference 15). The work planning process assesses risk to drive work prioritisation. • Work Management also includes preparation of risk assessments and method statements to manage risks to people, plant and the environment whilst undertaking the work. | As per process |

| | Action | Responsibility |
|--|--|---|
| | <ul style="list-style-type: none"> • Job and task risk assessment: Minor work not covered by a Work Order is controlled by the application of Risk Assessment (Reference 16) which incorporates Time Out for Personal Safety and considers environmental risks. The setting to work, pre-job and post-job debrief process will ensure risks have been considered and are communicated (Reference 17). | |
| <p>4.3.5</p> | <p>Supply Chain Risks (Work, Services and Goods):</p> <ul style="list-style-type: none"> • Environmental Risks Arising from Supply Chain are identified, assessed and controlled via the Procurement Process (Reference 18). This includes selection of companies; specification of work, services and goods; and delivery of work, services and goods to ensure management of environmental risks. This is supported by the Health, Safety and Environmental Requirements for Contractors Standard (Reference 19). | <p>As per process</p> |
| <p>4.3.6</p> | <p>Projects:</p> <ul style="list-style-type: none"> • Environmental Risks Arising from Projects are identified, assessed and controlled via the Project Management Process (Reference 20) using the Environmental Aspect/Impact and Waste Management Assessment Form (Reference 21). | <p>As per process</p> |
| <p>4.3.7</p> | <p>Engineering Change Maintain Design Integrity:</p> <ul style="list-style-type: none"> • Environmental Risks Arising from Engineering Changes which have the potential to impact on nuclear safety are identified, assessed and controlled via the Maintain Design Integrity Process (Reference 22) and the Environmental Specialist Assessment (Reference 23). | <p>As per process</p> |
| <p>4.4 Environmental Actions and Objectives</p> | <div style="border: 2px solid black; padding: 5px; text-align: center;"> <p>4.4</p> <p>Planning Actions, Objectives and Targets</p> </div> | |
| <p>4.4.1</p> | <p>Environmental Actions and Planning</p> <p>The environmental policy (Section 4.2.2) and assessment of risks (Section 4.3) is used to determine appropriate actions and controls to deliver the policy and address significant risks to ensure intended outcome of the EMS is achieved. These are integrated into the NGL business processes as appropriate. Actions and controls may be:</p> <ul style="list-style-type: none"> • Included in plant design and engineering controls; • Embedded into procedures, work instructions etc; • Delivered via competence, training and awareness; • Inspection, maintenance or testing; • Part of an improvement programme or key objective (Section 4.4.2) <p>When determining whether actions are required and appropriate the level of risk, BAT/BPM assessment, economic and technological viability will be considered. Effectiveness of actions is monitored via performance monitoring (Section 4.8).</p> | <p>As per process used to manage risk</p> |

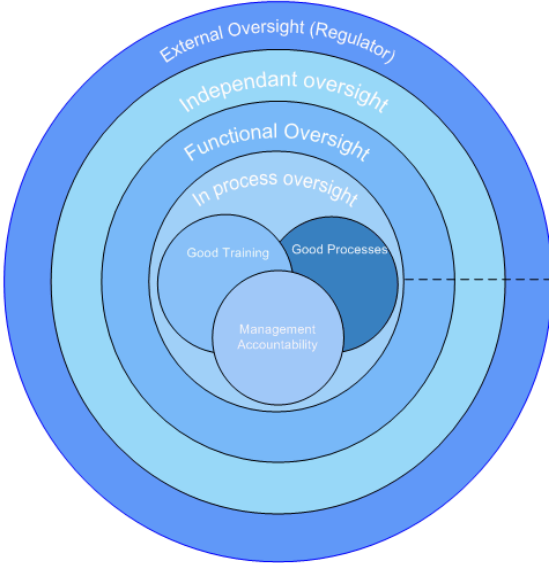
| | Action | Responsibility |
|---------------------|---|--|
| <p>4.4.2</p> | <p>Setting Environmental Objectives, Improvement Targets and Transition Plan</p> <p>Strategic objectives and improvement targets for environmental management are developed, monitored and managed as part of the Fleet Performance Management Programme (Reference 24). The Generation Environment Manager shall input to this process.</p> | <p>As per process with Generation Environment Manager input</p> |
| | <p>Develop a fleet five year environmental transition plan with key fleet objectives and targets. This shall support delivery of the strategic objectives, policy, manage significant fleet risks and deliver the intended outcome of the EMS. The fleet five year environmental transition plan should be defined by considering performance data, events, output from risk assessment processes (Section 4.3) and forthcoming changes.</p> | <p>Generation Environment Manager and ESGH Peer Group</p> |
| | <p>Embed activities and work required to deliver the fleet five year transition plan at the relevant level and within the relevant organisation function via:</p> <ul style="list-style-type: none"> • GEM business and work plans; • Station and ESGH business and improvement plans; • Environmental peer group improvement plans (Section 4.2.4); and • Other process / team business and improvement plans. <p>The Business Planning and Performance Improvement Processes (References 24 and 25) shall be used as appropriate to drive delivery.</p> | <p>Generation Environment Manager; Station TSSMs; TSG Manager; Station ESGHs; Environmental Peer Group Chairs; Process Owners</p> |
| | <p>Environmental objectives and targets shall be established as a minimum for each power station and TSG. These shall be consistent with the policy and intent of the EMS and shall be Specific, Measurable (where possible), Achievable, Relevant and Time Bound (SMART).</p> <p>Note that these objectives and targets may directly reflect the requirements of the fleet transition five year plan but should also take into account the significant environmental aspects, compliance obligations and other risks (Section 4.3).</p> | <p>Station and TSG ESGR (or equivalent as per Appendix F)</p> |

| | Action | Responsibility | | | | | | | | | | | | | | |
|--|---|---------------------------|----------------------|----------------------|-----------------|------------------------------------|--------------------------------|-----------------------------|-------------------------------|-----------------------------|--------------------------------|--|--------------|--|---|--|
| <p>4.4.3</p> | <p>Monitoring Delivery Against Plan</p> <p>Delivery against the business and improvement plans and objectives and targets shall be monitored and in the event of deviation from plan appropriate actions agreed as follows:</p> <table border="1" data-bbox="256 555 1233 1167"> <thead> <tr> <th data-bbox="256 555 1233 609">Plan / Objective / Target</th> <th data-bbox="256 609 1233 678"></th> </tr> </thead> <tbody> <tr> <td data-bbox="256 678 1233 781">Strategic objectives</td> <td data-bbox="256 678 1233 781">Generation SODT</td> </tr> <tr> <td data-bbox="256 781 1233 884">5 year environment transition plan</td> <td data-bbox="256 781 1233 884">Generation Environment Manager</td> </tr> <tr> <td data-bbox="256 884 1233 987">Peer group improvement plan</td> <td data-bbox="256 884 1233 987">Environment Peer Group Chairs</td> </tr> <tr> <td data-bbox="256 987 1233 1090">GEM business and work plans</td> <td data-bbox="256 987 1233 1090">Generation Environment Manager</td> </tr> <tr> <td data-bbox="256 1090 1233 1167">Station business and improvement plans</td> <td data-bbox="256 1090 1233 1167">Station SODT</td> </tr> <tr> <td data-bbox="256 1167 1233 1317">Delivery of station / TSG specific objectives, targets and relevant actions within business plans which support the 5 year environment transition plan</td> <td data-bbox="256 1167 1233 1317">Station and TSG ESG (or equivalent as per Appendix F)</td> </tr> </tbody> </table> | Plan / Objective / Target | | Strategic objectives | Generation SODT | 5 year environment transition plan | Generation Environment Manager | Peer group improvement plan | Environment Peer Group Chairs | GEM business and work plans | Generation Environment Manager | Station business and improvement plans | Station SODT | Delivery of station / TSG specific objectives, targets and relevant actions within business plans which support the 5 year environment transition plan | Station and TSG ESG (or equivalent as per Appendix F) | |
| Plan / Objective / Target | | | | | | | | | | | | | | | | |
| Strategic objectives | Generation SODT | | | | | | | | | | | | | | | |
| 5 year environment transition plan | Generation Environment Manager | | | | | | | | | | | | | | | |
| Peer group improvement plan | Environment Peer Group Chairs | | | | | | | | | | | | | | | |
| GEM business and work plans | Generation Environment Manager | | | | | | | | | | | | | | | |
| Station business and improvement plans | Station SODT | | | | | | | | | | | | | | | |
| Delivery of station / TSG specific objectives, targets and relevant actions within business plans which support the 5 year environment transition plan | Station and TSG ESG (or equivalent as per Appendix F) | | | | | | | | | | | | | | | |
| <p>4.5 EMS Support Arrangements</p> | <table border="1" data-bbox="863 1178 1224 1305"> <tr> <td data-bbox="863 1178 1224 1234" style="background-color: #0056b3; color: white; text-align: center;">4.5</td> </tr> <tr> <td data-bbox="863 1234 1224 1305" style="text-align: center;">Support Arrangements</td> </tr> </table> | 4.5 | Support Arrangements | | | | | | | | | | | | | |
| 4.5 | | | | | | | | | | | | | | | | |
| Support Arrangements | | | | | | | | | | | | | | | | |
| <p>4.5.1</p> | <p>The following support arrangements are essential to enable delivery of an effective EMS:</p> <ul style="list-style-type: none"> • NGL Documents and Records Section 4.5.2 • Ensuring availability of appropriate resources Section 4.5.3 • Competency and training Section 4.5.4 • Communication and awareness Section 4.5.5 | <p>See sections below</p> | | | | | | | | | | | | | | |
| <p>4.5.2</p> | <p>NGL Documents and Records</p> <p>NGL documents required to be maintained to deliver an effective EMS (for example standards, procedures, guidance notes, forms, templates and environmental advice notes) shall be developed and controlled in accordance with the Document Control Process (Reference 26).</p> <p>Any other documented information including records which are required to be maintained to deliver an effective EMS and to demonstrate the intended outcome of the EMS is achieved shall be specified within company processes, standards and work instructions etc. Records shall be managed in accordance with the Record Management process (Reference 27).</p> | <p>As per process</p> | | | | | | | | | | | | | | |

| | Action | Responsibility |
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| | Refer to Section 4.5.5 for control of communications / information received from regulators or third parties. | |
| <p>4.5.3</p> | <p>Resources</p> <p>Adequate resources will be provided as required by NGL Management System Manual (Reference 1) and secured via the Business Plan Process (Reference 25).</p> <p>Key resources will be controlled via:</p> <ul style="list-style-type: none"> • Asset Management (Reference 14); • Financial Control (Reference 28); • Procurement and Materials Management (Reference 18); • Human Resources (Reference 29); and • Management of Change (Reference 30). | As per process |
| <p>4.5.4</p> | <p>Competence and Training</p> <p>Recruitment, selection and orientation of staff are covered by the Human Resources Process (Reference 29). The recruitment process will include ensuring appropriate SQEP requirements for the role.</p> <p>The ‘Systematic Approach to Training’ (SAT) process (Reference 31) is used to assess role or post specific competence requirements and determine required education, training or experience to achieve this. Staff also receive nuclear professionalism training (Reference 32) appropriate to their role.</p> <p>Training requirements for environment specific roles are specified for GEM Environment Officers (Reference 33) and Station ESG Environmental Safety Engineers (Reference 34). Environmental training requirements appropriate for all other roles will be specified within the relevant Training Programme Description, Post Training Profiles and Role Training Profiles.</p> <p>Training records are held electronically in the personnel management system on the intranet (known as SAP).</p> <p>The competence and training of contractors working on behalf of NGL is managed via the Procurement Process (Reference 18).</p> | As per process |
| <p>4.5.5</p> | <p>Communication and Awareness of Environmental Matters</p> <p>Communications of environmental matters to employees, those working on our behalf and community liaison shall be in accordance with Nuclear Generations Communication Process (Reference 35).</p> <p>Communication with Employees</p> <p>Arrangements to ensure awareness of employees of environmental matters relevant to their work includes:</p> <ul style="list-style-type: none"> • Environmental peer group and station meetings (Reference 4.2.4 and Appendix D); • Leadership (leading by example), team meetings, daily safety messages, pre and post job briefings (References 17); • Corrective action programme and use of operational experience process, (Reference 36); | <p>As per process</p> <p>As per process</p> |

| | Action | Responsibility | | |
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| | <ul style="list-style-type: none"> • Access to environmental standards and procedures via CDMS (Reference 26); • Embedding of environmental requirements within work management, work instructions and processes (Reference 15); • Info Comms and Process Comms (Reference 35); and • Promotional campaigns, screensavers etc. | | | |
| | <p>Communication between NGL and the Rest of Generation</p> <p>The Generation Environment Manager sponsors the Coal, Gas and Renewables (CGR) Environmental Peer Group and shall nominate a chair. This purpose of this group is to:</p> <ul style="list-style-type: none"> • To ensure company compliance with relevant EU and UK legislation; • Agreement of targets in support of Medium Term Plan; • To share OPEX in a timely manner to reduce environmental events; • To share and replicate best practice to underpin sustainable environmental performance; • To influence improvements in company environmental performance; and • To set direction and accountability for local environmental improvements. <p>The CGR peer group shall convene at least quarterly.</p> | <p>Generation Environment Manager</p> <p>and</p> <p>CGR Chair</p> | | |
| | <p>Communication with Regulators</p> <p>External interactions with regulators on environmental issues are managed in accordance with Safety Regulator Interactions (Reference 37) and Management of Safety Regulator Correspondence (Reference 38).</p> | <p>As per process</p> | | |
| | <p>Communication with Other External Stakeholders</p> <p>NGL Management System Manual (Reference 1) sets out communication with other external stakeholders (for example media, supply chain partners, NLF trust, INPO, WANO).</p> <p>Environmental reporting to stakeholders is as per Reporting Procedure (Reference 39) and for specific compliance obligations will be identified in the relevant NGL standard (Appendices A, B and E).</p> <p>All NGL power stations have established regular meetings with representatives from their local communities. These enable sites to communicate on environmental performance and invite feedback from the local community.</p> | <p>As per process</p> | | |
| <p>4.6 Develop EMS Controls</p> | <table border="1"> <tr> <td style="background-color: #0056b3; color: white; text-align: center;">4.6</td> </tr> <tr> <td style="text-align: center;">Develop Controls</td> </tr> </table> | 4.6 | Develop Controls | |
| 4.6 | | | | |
| Develop Controls | | | | |
| <p>4.6.1</p> | <p>Establish Operational Controls</p> <p>Ensure development, approval and review of NGL environmental standards, guidance and other controls required for an effective management system, this shall include documentation to:</p> <ul style="list-style-type: none"> • Set standards for required EMS support processes; | <p>Generation Environment Manager</p> | | |

| | Action | Responsibility |
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| | <ul style="list-style-type: none"> • Set standards to manage the key risks identified; • Set standards to ensure compliance with legal and other obligations; and • Enable delivery of the policy. <p>These standards shall include appropriate performance indicators relevant to the process and monitoring and measurement to confirm effectiveness and compliance in accordance with requirements in Section 4.8.2 and 4.8.6. Key environment process specific documentation is identified in Appendix E.</p> | |
| | <p>Ensure environmental controls relevant to their process are embedded to support an effective EMS and management of process environmental risks identified as per Appendix A.</p> <p>Processes shall include appropriate performance indicators relevant to the process and monitoring and measurement to confirm effectiveness and compliance in accordance with requirements in Section 4.8.2 and 4.8.6.</p> | Heads of Processes |
| | <p>Local arrangements shall be developed where necessary to expand on NGL fleet documents (e.g. standards) to:</p> <ul style="list-style-type: none"> • Incorporate site specific requirements; • Control site specific risks and comply with any local legal or other compliance obligations; and • Clarify local implementation arrangements of the NGL standards. | TSSM; TSG Manager; Generation Environment Manager (for Non Operational EMS) |
| <p>4.6.2</p> | <p>Establish Emergency Preparedness Controls</p> <p>Emergency response arrangements are specified within the NGL Emergency Arrangements Process (Reference 40).</p> | As per process |
| <p>4.6.3</p> | <p>Change Control</p> <p>The potential impact of planned changes (for example to resources, people, plant design, operation etc) shall be considered via the risk assessment and resource management processes identified in Sections 4.3 and 4.5. These will consider the potential impacts through the lifecycle of the planned change (i.e. from design through to construction, modification, operation and final decommissioning).</p> <p>Other unplanned changes shall be identified and managed (including potential environmental risks arising) via:</p> <ul style="list-style-type: none"> • Performance evaluation (Section 4.8); • Operational Decision Making in the Management of Operations Process (Reference 41); • Management of Maintenance Process (Reference 42). | As per process |

| | Action | Responsibility |
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| 4.7 | Implement and Maintain Controls <div style="border: 2px solid black; padding: 5px; margin: 10px auto; width: fit-content;"> <div style="background-color: #0056b3; color: white; padding: 2px; text-align: center; font-weight: bold;">4.7</div> <p style="text-align: center;">Implement and Maintain Controls</p> </div> | |
| 4.7.1 | Implement Controls Responsibilities for implementing environmental controls are included within the relevant documents (refer to Appendices A, B and E). | As per process |
| 4.7.2 | Maintain Controls Plant which has potential to pose a significant risk to the environment in the event of failure or deterioration in condition or operability / availability is controlled by: <ul style="list-style-type: none"> Environmental Maintenance Inspection and Test Specification (EMITS) (Reference 43) to ensure appropriate maintenance, inspection, condition monitoring and response to adverse engineering conditions; and/or Environmental Specifications (ESPECS) (Reference 44) to monitor and respond to any changes in operability / availability which may elevate environmental risk levels. Controls which are embedded within process documentation (e.g. NGL standards) shall be subject to periodic review as part of the Document Management Process (Reference 26) to ensure they remain appropriate to the risk posed. | As per process |
| 4.8 | Monitoring and Performance Evaluation <div style="border: 2px solid black; padding: 5px; margin: 10px auto; width: fit-content;"> <div style="background-color: #0056b3; color: white; padding: 2px; text-align: center; font-weight: bold;">4.8</div> <p style="text-align: center;">Monitoring and Performance Evaluation</p> </div> | |
| 4.8.1 | The NGL oversight model follows a layered approach, commonly known as the onion model as illustrated below. <div style="text-align: center; margin-top: 20px;">  </div> <div style="margin-top: 20px;"> <ul style="list-style-type: none"> <li style="border: 1px solid black; border-radius: 10px; padding: 5px; margin-bottom: 10px;"> In-Process Oversight Station: - Performance Monitoring - Compliance Evaluation - Management Review <li style="border: 1px solid black; border-radius: 10px; padding: 5px; margin-bottom: 10px;"> Functional Oversight GEM: - Performance Monitoring - Self Assessment / Benchmarking - Internal Controls - Management Review <li style="border: 1px solid black; border-radius: 10px; padding: 5px; margin-bottom: 10px;"> Independent Oversight INA / Quality: - Audits <li style="border: 1px solid black; border-radius: 10px; padding: 5px;"> External Independent Oversight Regulators, Peer Groups, Auditors - EA, SEPA, ONR, MMO - INPO - Third party auditors </div> | Information |

| | Action | Responsibility |
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| <p>4.8.2</p> | <p>Performance Monitoring</p> <p>The Fleet Performance Improvement Process (Reference 24) specifies requirements for performance monitoring and evaluation, including selection and monitoring of key performance indicators. Environmental indicators and their definitions are in the Performance Management Metrics Data Dictionary (Reference 45) series of documents.</p> <p>GEM monitors, trends, analyses and reports on the fleet environmental performance (Reference 39). This enables any adverse trends to be identified to enable appropriate action to be taken.</p> <p>Appropriate monitoring requirements are embedded in processes to enable performance to be measured, evaluated and action to be taken in the event of adverse results. Types of monitoring includes:</p> <ul style="list-style-type: none"> • Plant condition and operability via EMITS and ESPECS (Section 4.7.2); • Quantity, composition and/or quality of key discharges to the environment; • Monitoring environmental conditions to enable early identification of changes - implications of this may be either potential for changes to environment to impact on NGL or potential that NGL operations are not as planned and have impacted on the environment; • Quantity of resource usage and waste disposals; • Adverse indicators: defects and condition reports; • System health (SHIP); and • Monitor effectiveness / health of EMS (e.g. level of deployment of controls³). <p>Selection of monitoring techniques may be inline instrumentation, sampling and analysis, direct observation, remote observation, derivation, calculation or estimation. Type of monitoring and calibration requirements will be appropriate to the level of risk. Methods for monitoring, evaluation against specified criteria/indicators and analysis shall be specified. Communication of results shall also be specified if required (e.g. to regulators or other stakeholders).</p> | <p>As per process</p> <p>As per process</p> <p>As per process</p> |
| <p>4.8.3</p> | <p>Evaluation of Compliance</p> <p>Evaluation of compliance against the obligations applicable to NGL (Section 4.3) shall be undertaken in accordance with 'Evaluation of Environmental Compliance' (Reference 46).</p> | <p>As per process</p> |
| <p>4.8.4</p> | <p>Internal Audit</p> <p>Internal audit of the EMS to confirm it is effective and conforms to planned arrangements (as per this ICP) and ISO14001 (Reference 4) is in accordance with the Independent Assessment Process (Reference 47). The 'Management System Auditing' and 'Audit Programme' specifications (References 48 and 49) set out how NGL undertakes and plans audits.</p> | <p>As per process</p> |

³ Delivery of training, effectiveness of compliance evaluations and management review, compliance with planned programme

| | Action | Responsibility |
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| 4.8.5 | <p>Internal Controls</p> <p>Internal controls assessment to confirm that the EMS conforms to requirements shall be undertaken by Generation Environment Manager in accordance with Internal Controls (Reference 50) within the Governance Process (Reference 5).</p> | Generation Environment Manager |
| 4.8.6 | <p>Self Assessment and Oversight</p> <p>Specifications will include oversight requirements appropriate for the process to ensure effectiveness is maintained.</p> <p>Functional Self Assessment and Benchmarking will be undertaken in accordance with the Organisational Learning Process (Reference 36). Environmental functional oversight shall be included within the GEM business and/or work plan and the output shall be appropriately recorded and communicated for example using the Surveillance Form (Reference 51).</p> | Information Generation Environment Manager |
| 4.8.7 | <p>Fleet EMS Management Review</p> <p>‘Process Management’ (Reference 52) sets out the NGL requirements for management review. The NGL EMS is reviewed at the Generation SODT as per ‘Delivery Team Specification and Terms of Reference’ (Reference 53) within the Governance Process (Reference 5). This includes an environmental ‘Deep Dive’ and approval of the Internal Controls (Section 4.8.5) to confirm the environment process continues to perform effectively to deliver the intended outcome.</p> <p>Meeting outputs will include appropriate actions and decision to ensure delivery of targets, effective improvement plans and compliance with arrangements.</p> | As per process |
| 4.8.8 | <p>Station / TSG Management Review</p> <p>Each station and TSG shall complete a management review of their deployment of the EMS in accordance with Appendix F.</p> | Station Plant Manager (as nominated ESRG chair) |
| 4.9 | Improvement | <div style="border: 2px solid black; padding: 5px; text-align: center;"> <p style="background-color: #0056b3; color: white; margin: 0; padding: 2px;">4.9</p> <p style="margin: 0;">Continual Improvement</p> </div> |
| 4.9.1 | <p>Improvements</p> <p>Priorities and potential improvements to NGL’s environmental performance and EMS are identified via risk assessment (Section 4.3), actions and objectives (Section 4.4) and performance evaluation (Section 4.8). These will be assessed and actions shall be taken to ensure the outcome of the EMS is delivered which includes continual improvement.</p> | Information |
| 4.9.2 | <p>Nonconformity and corrective action</p> <p>In the event of any potential or actual adverse condition being identified this shall be recorded and actioned in accordance with the Organisational Learning Process (Reference 36). Supporting guidance for environmental event reporting and categorisation is within ‘Environmental Event Categorisation’ (Reference 54).</p> | As per process |

5 Definitions

| | |
|--------|--|
| ALARA | As Low as Reasonably Achievable |
| BAT | Best Available Techniques |
| BERL | British Energy Risk Log |
| BPM | Best Practical Means |
| CEEMS | Central Environmental Management System (within EDF Energy) |
| CRC | Curriculum Review Committee |
| CSF | Corporate Steering Function |
| DADS | Discharges and District Survey (DADS) Peer Group |
| ECC | Environmental Compliance Co-ordinators |
| ECO | Environmental Conditions for Operation (within ESPECS) |
| EEG | Environmental Excellence Group |
| EMITS | Environmental Maintenance Inspection and Testing Schedule |
| EMS | Environment Management System |
| ESG | Environment Safety Group (at Station) |
| ESGH | Environmental Safety Group Head (at Station) |
| ESPECS | Environmental Specifications |
| ESR | Environmental Surveillance Requirements (identify whether ECO's are met) |
| ESRG | Environmental Strategy Review Group |
| GEM | Generation Environment Management (within HSE, Safety and Assurance) |
| HSE | Health, Safety and Environment (within Safety and Assurance) |
| ICP | Integrated Company Process |
| MSM | Management System Manual |
| INA | Independent Nuclear Assurance |
| INPO | Institute of Nuclear Power Operations |
| NGL | Nuclear Generation Limited |
| NGRL | Nuclear Generation Risk Log |
| NGLB | Nuclear Generation Limited Board |
| NG | Nuclear Generation |
| NLF | Nuclear Liabilities Fund |
| OPEX | Operational Experience |
| ORWG | Operational Radioactive Waste Group |
| SAT | Systematic Approach to Training |
| SHIP | System Health Indicator Programme |
| SODT | Safety and Oversight Delivery Team |
| SQEP | Suitably Qualified and Experienced Personnel |
| TAC | Training Advisory Committee |
| TSSM | Technical and Safety Support Manager |

WANO

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6 References

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| 1 | BEG/MSM/001 | NGL Management System Manual |
| 2 | BE/POL/009 | EDF Energy Environmental Policy (EDFE-POL-ENV-03) |
| 3 | BEG/SPEC/MSM/003 | Cross References Between the Management System Manual and External Standards |
| 4 | N/A | BS EN ISO 14001:2015 Environmental Management System |
| 5 | BE/ICP/GOV/001 | Governance |
| 6 | ERO/REP/0162/GEN | Environmental Management Process: Organisational Context and Key Stakeholders |
| 7 | ERO/MAN/001 | GEM Management Manual |
| 8 | BEG/SPEC/SHE/ENVI/042/01 | Joint Radioactive Waste (HAW and LAW) Arrangements |
| 9 | BEG/SPEC/SHE/ENVI/020 | Compliance with Permits Issued under the Radioactive Substances Regulations |
| 10 | BEG/SPEC/SHE/ENVI/011 | Aspects Identification and Scoring Process |
| 11 | BEG/SPEC/SHE/ENVI/002 | Register of Environmental Legislative Regulatory and Other Policy Requirements |
| 12 | BEG/SPEC/SHE/ENVI/021 | The Application of Best Practicable Means and Best Available Techniques |
| 13 | BEG/ICP/API/001 | Risk Management |
| 14 | BEG/ICP/API/003 | Asset Planning |
| 15 | BEG/ICP/WM/001 | Online Work Control Process at a Nuclear Power Station |
| 16 | BEG/SPEC/SHE/COP/016 | Risk Assessment Process |
| 17 | BEG/SPEC/OPS/HU/005 | Setting to Work Including Pre Job Brief and Post Job DeBrief |
| 18 | BEG/ICP/PRO/010 | Acquire Goods and Services Standard |
| 19 | BEG/SPEC/SHE/COP/004 | Health, Safety and Environmental Requirements for Contractors |
| 20 | BEG/ICP/PD/001 | Project Management |
| 21 | BEG/FORM/PD/023 | Investment Delivery Environmental Aspect / Impact and Waste Management Assessment Form |
| 22 | BEG/ICP/DAO/001 | Maintain Design Integrity |
| 23 | BEG/FORM/SHE/ECA/035 | Environmental Safety and LC34 Compliance |
| 24 | BEG/ICP/OPS/011 | Fleet Performance Management through the Fleet Approach |
| 25 | BEG/ICP/BUS/001 | Business Planning |
| 26 | BEG/ICP/DM/003 | Document Control |
| 27 | BEG/ICP/DM/006 | Records Management |
| 28 | BEG/ICP/FIN/001 | Financial Control |

| | | |
|----|----------------------------|---|
| 29 | BEG/ICP/HR/006 | Management of Human Resources |
| 30 | BEG/ICP/HR/MOC/001 | Licence Condition 36 Organisational Capability – Compliance Arrangements |
| 31 | BEG/ICP/TRNG/001 | Systematic Approach to Training Principles and Responsibilities |
| 32 | BEG/ICP/OPS/014 | Management of Human Performance and Monitoring Improvement of Nuclear Safety Culture |
| 33 | BEG/TRNG/TPD/617/001 | Generation Environment Management, Environment Officer |
| 34 | BEG/TRNG/TPD/203/ADDEND/01 | TPD Addendum – Environmental Safety Engineer |
| 35 | BEG/ICP/COMM/001 | Nuclear Generation Communications |
| 36 | BEG/ICP/OL/001 | Organisational Learning Process ⁴ |
| 37 | BEG/SPEC/SHE/010 | Safety Regulator Interactions |
| 38 | BEG/SPEC/SHE/004 | Management of Safety Regulatory Correspondence |
| 39 | ERO/PROC/016 | Environmental Performance Reporting |
| 40 | BEG/ICP/OPSV/EPG/001 | Developing and Maintaining Emergency Arrangements |
| 41 | BEG/ICP/OPS/001 | Management of Operations |
| 42 | BEG/ICP/MNT/001 | Management of Maintenance |
| 43 | BEG/SPEC/SHE/ENVI/023 | Preparation, Management and Implementation of The Environmental Maintenance, Inspection and Testing Schedules (EMITS) |
| 44 | BEG/SPEC/SHE/ENVI/022 | Production, Modification and Use of Environmental Specifications ESPECS |
| 45 | BEG/SPEC/NOS/003 | Performance Management Metrics Data Dictionary |
| 46 | BEG/SPEC/SHE/ENVI/036 | Evaluation of Compliance |
| 47 | BEG/ICP/QUA/005 | Independent Assessment |
| 48 | BEG/SPEC/QUA/020 | Management System Auditing |
| 49 | BEG/SPEC/QUA/021 | Management System Audit Programme |
| 50 | BEG/SPEC/GOV/002 | Internal Controls |
| 51 | ERO/FORM/014 | Environmental Surveillance Form |
| 52 | BEG/SPEC/MSM/001 | Process Management |
| 53 | BEG/SPEC/GOV/001 | 'Delivery Team Specification and Terms of Reference' |
| 54 | BEG/SPEC/SHE/ENVI/015 | Environmental Event Categorisation |

⁴ CAP and Self Assessment (BEG/ICP/OPSV/CAP/001) and OPEX (BEG/ICP/OPSV/OPEX/001) have been superseded by the Organisational Learning Process as of 31/12/2016.

7 Records

| Record Title | Template No./Identifier | Record No./Identifier or Link to Record | Requirement for Record | Record Originator | Record Owner | Retention Period | Storage Location | Security Classification |
|---|--|---|---------------------------------|---|---|----------------------------|---|-------------------------|
| Environmental Management Process: Organisational Context and Key Stakeholders | ERO/FORM/005 | ERO/REP/0162/GEN | Section 4.1.1 and ISO14001:2015 | GEM | GEM | Non – permanent (5 years) | CDMS | Not Protectively Marked |
| Environment Policy | N/A | BE/POL/009 | Section 4.2.2 and ISO14001:2015 | EDF Energy | NGLB | Non – permanent (10 years) | CDMS | Not Protectively Marked |
| Environmental Peer Group Minutes | N/A | GEM | Section 4.2.4 & 4.2.5 | Environmental Peer Group Chairs | GEM | Non – permanent (5 years) | V:ERO | Not Protectively Marked |
| 5 Year Environment Transition Plan | N/A | GEM | Section 4.4.2 | ESGH Peer Group / Generation Environment Manager | Generation Environment Manager | Non – permanent (5 years) | V:ERO | Not Protectively Marked |
| Objectives and Targets | TBC (To be issued) action included on implementation plan which accompanies this ICP | Station ESG and TSG ECC | Section 4.4.2 and ISO14001:2015 | Station / TSG ESG (or equivalent as per Appendix F) | Station / TSG ESG (or equivalent as per Appendix F) | Non – permanent (5 years) | Station / TSG ESG (or equivalent as per Appendix F) | Not Protectively Marked |
| Station / TSG Environmental Management Review | N/A | Station / TSG ESG (or equivalent as per Appendix F) | Section 4.8.8 and ISO14001:2015 | Station / TSG ESG (or equivalent as per Appendix F) | Station / TSG ESG (or equivalent as per Appendix F) | Non – permanent (5 years) | Station / TSG ESG (or equivalent as per Appendix F) | Not Protectively Marked |

Records associated with this ICP shall be controlled, stored and archived in accordance with the requirements of Record Management Process (Reference 27).

Appendix A NGL Processes, Organisation and Key Environmental Controls

| Process | How does the process support the Environmental Management System (EMS)? | BEG/ICP/SHE/017 Section | Key environmental controls required in process | Process Reference for Control |
|---|---|-------------------------|--|--|
| Management System Manual BEG/MSM/001 | Determines NGL organisational context, key stakeholders, their needs and expectations. | 4.1.1 | N/A – Environment Process Specific analysis supports this | N/A |
| | Establishes leadership responsibilities for directing NGL to ensure consistency with EDF Energy policies and legal compliance; setting strategic direction; and for development and implementation of management systems. | 4.2.1 | N/A | N/A |
| | Sets out organisational set up, responsibilities, accountability and authority for the management systems. | 4.2.3 | Define responsibilities for EMS (including NGL Process Owner and Station Process Owner). | BEG/MSM/001 |
| | Requires provision of adequate resources for deployment of the management system. | 4.5.3 | N/A | N/A |
| | Sets out communication with other external stakeholders (for example media, supply chain partners, NLF trust, INPO, WANO). | 4.5.5 | N/A | N/A |
| Risk Management BEG/ICP/API/001 | Significant risks which may impact on environmental safety (including those which require funding to be secured via the Medium Term Plan) will be entered into the NGL Risk Log (formerly BERL) for assessment. | 4.3.3 | Inclusion of environmental assessment within the NGL Risk Log scoring | BEG/SPEC/API/102 Risk Management System / NG Risk Log |
| Asset Planning BEG/ICP/API/003 | Prioritise and manage risks input into the NGL Risk Log (see above) to drive improvement. | 4.3.3 4.9.1 | N/A | N/A |
| | Ensure physical resources are maintained to control risks. | 4.5.3 | | |

| Process | How does the process support the Environmental Management System (EMS)? | BEG/ICP/SHE/017 Section | Key environmental controls required in process | Process Reference for Control |
|---|---|-------------------------|--|---|
| Business Planning BEG/ICP/BUS/001 | Work required to deliver the fleet five year environmental transition plan shall be incorporated into Station, GEM and other business plans as appropriate. | 4.4.2 4.9.1 | N/A | N/A |
| | Ensure required resources are secured. | 4.5.3 | | |
| Financial Control BEG/ICP/FIN/001 | Controls financial resources required to support deployment of the EMS. | 4.5.3 | N/A | N/A |
| Management of Change BEG/ICP/HR/MOC/001 | Ensures that any changes in organisation or organisational capability (i.e. financial and human resources) don't adversely impact on safe operation of the power stations. | 4.5.3 | N/A | N/A |
| Performance Improvement Fleet Performance BEG/ICP/OPS/011 | Ensure strategic objectives and improvement targets are developed, monitored and managed. Support delivery of the five year environmental fleet transition plan. | 4.4.2 4.8.2 4.9.1 | Specify environmental indicators and their definitions. | Performance Management Metrics Data Dictionary BEG/SPEC/NOS/003 and supporting document series |
| | Identify any changes in performance. | 4.6.3 | | |
| Governance BE/ICP/GOV/001 | Sets out the process for meeting the needs of key NGL stakeholders. | 4.1.1 | N/A - Environment Process Specific analysis supports this | N/A |
| | Establishes leadership responsibilities for directing NGL to ensure consistency with EDF Energy policies and legal compliance; setting strategic direction; and for development and implementation of management systems. | 4.2.1 | N/A | N/A |
| | Specifies the internal controls assessment process (Internal Controls BEG/SPEC/GOV/002) which confirms that NGL processes conforms to requirements. | 4.8.5 4.9.1 | N/A – Refer to Appendix C within BEG/ICP/SHE/017 for relevant Internal Controls tests for the EMS. | N/A |

| Process | How does the process support the Environmental Management System (EMS)? | BEG/ICP/SHE/017 Section | Key environmental controls required in process | Process Reference for Control |
|---|--|-------------------------|---|---|
| | Ensures that NGL processes are reviewed by senior management to confirm that they continue to perform effectively and deliver the intended outcome. This is achieved via the SODT process 'Deep Dives' and review/approval of Process Internal Controls | 4.8.7 4.9.1 | Includes environmental process within Safety and Oversight Delivery Team terms of reference. | BEG/SPEC/GOV/001 Delivery Team Specification and Terms of Reference |
| Regulatory Adherence BEG/ICP/SHE/002 | Specifies process for managing interactions with regulators. | 4.5.5 | Include environmental regulators within remit. | BEG/SPEC/SHE/004 Management of Safety Regulatory Correspondence BEG/SPEC/SHE/010 Safety Regulator Interactions |
| Independent Assessment BEG/ICP/QUA/005 | Requires internal audit of management systems / processes to confirm conformity with NGL arrangements and ISO14001 and that the management system / process is effectively implemented and maintained. These are planned and undertaken (in accordance with 'Management System Auditing' BEG/SPEC/QUA/020 and 'Audit Programme' BEG/SPEC/QUA/021). | 4.8.4 4.9.1 | Include environmental management system / process within audit programme. | BEG/SPEC/QUA/021 |
| Management of Nuclear Fuel and Dangerous Goods BEG/ICP/FUEL/001/01 BEG/ICP/FUEL/001/02 BEG/ICP/FUEL/001/03 | Management of environmental issues within the fuel lifecycle. | 4.6.1 | Potential environmental implications associated with the lifecycle of fuel and dangerous goods are considered and controlled. | Lifecycle assessments for fuel management (reference TBC). |

| Process | How does the process support the Environmental Management System (EMS)? | BEG/ICP/SHE/017 Section | Key environmental controls required in process | Process Reference for Control |
|--|--|-------------------------|---|---|
| Management of Maintenance BEG/ICP/MNT/001 | Maintain plant / resolve defects to ensure potential risk posed by plant are minimised (including environmental risk). | 4.6.1 4.6.3 | N/A – Maintenance of environmentally sensitive / vulnerable plant and environmental barriers will be in accordance with work management / engineering processes. | N/A |
| Management of Operations BEG/ICP/OPS/001 | Operate plant and respond to any changes to ensure potential risks posed are minimised (including environmental risk). Operating instructions, plant tours and Operational Decision Making process support this. | 4.6.1 4.6.3 | ESPECs establish operating criteria (Environmental Conditions for Operation ECOs) for environmentally sensitive / vulnerable plant and barriers. Where required Environmental Surveillance Requirements (ESR's) are established to enable compliance with ECO's to be demonstrated. | BEG/SPEC/SHE/ENVI/022 |
| | | | Ensure controls required to minimise risk arising from operations are embedded. | BEG/ICP/OPS/001 and supporting specifications |
| Outage Management BEG/ICP/OPS/009 | If appropriate, changes in plant state will feed into the outage planning process, this includes plant which may be environmentally significant. This process will prioritise and plan work. | 4.6.1 | N/A | N/A |
| Work Management BEG/ICP/WM/001 | Prioritise routine and emergent work by consideration of risk (including that arising from potential environmental impact). This will drive improvements. | 4.3.4 4.9.1 | Included in implementation plan actions which accompanies V011 of this ICP. | TBC |

| Process | How does the process support the Environmental Management System (EMS)? | BEG/ICP/SHE/017 Section | Key environmental controls required in process | Process Reference for Control |
|--|---|-------------------------|--|---|
| | Ensures all work undertaken within the scope of this process is subject to risk assessment and method statement to manage risks arising from doing it (including that arising from potential environmental impact). | 4.3.4 4.9.1 | Included in implementation plan actions which accompanies V011 of this ICP. | TBC |
| | Plans routine work activities. | 4.6.1 | Ensure activities specified in EMITS are incorporated into work planning cycles as per requirements. | BEG/ICP/WM/001 Work Management |
| Maintain Design Integrity BEG/ICP/DAO/001 | Ensures that potential risks arising from changes to design which may impact on nuclear safety are identified, assessed and controlled. | 4.3.7 4.9.1 | Undertake environmental assessment where there is potential for environmental impact arising from the proposed changes and ensure identified controls and improvements are incorporated. | Environmental Safety and LC34 Compliance BEG/FORM/SHE/ECA/035 |

| Process | How does the process support the Environmental Management System (EMS)? | BEG/ICP/SHE/017 Section | Key environmental controls required in process | Process Reference for Control |
|--|--|-------------------------|--|---|
| Design Control BEG/ICP/DCP/001 | <p>Design control is “the discipline by which: engineering scope, design, safety case strategy, change control, cost, risk and benefits realisation is integrated in a sustainable way to meet the business objectives for Nuclear Generation”. I.e. it is the process to ensure consistent, value engineering solutions for investment and significant refurbishment activities.</p> <p>Ensures compliance with all regulatory and statutory requirements and company processes. Also ensures consideration of lifecycle implications arising from the design. Design Control process provides means to support successful delivery of NGL investment activities.</p> | N/A | N/A (controls are delivered via other processes e.g. Maintain Design Integrity and Project Management). | N/A |
| Technical Governance BEG/ICP/ENG/SH/001 | Understand and manage fleet technical risks by specifying and monitoring technical standards and guidance for the plant. The process provides a key contribution to achieving company objectives for safe operation, equipment reliability and effective asset management. | 4.6.1 | <p>Where appropriate set standards for environmentally sensitive / vulnerable plant and barriers.</p> <p>Standards for design, maintenance, operation control and/or modification should include environmental/ sustainability issues where appropriate.</p> | <p>Technical Governance BEG/ICP/ENG/SH/001 Note various standards under this process will have environmental risk control implications.</p> |

| Process | How does the process support the Environmental Management System (EMS)? | BEG/ICP/SHE/017 Section | Key environmental controls required in process | Process Reference for Control |
|---|---|-------------------------|---|---|
| Project Management BEG/ICP/PD/001 | Project management of investment work – Investment Delivery Process (IDP) applies to all work funded by Medium Term Plan which is of sufficient value, complexity or business significance to be designated as a project. ⁵ Ensures compliance with company processes and legislation. | 4.3.6 4.6.1 4.9.1 | Projects need to comply with ISO14001, BEG/ICP/SHE/017 and environmental legislation. | BEG/ICP/PD/001 |
| | | | Environmental risks arising from projects shall be identified, assessed and controlled. | BEG/FORM/PD/023 Environmental Aspect/ Impact and Waste Management Assessment |
| Management of Engineering BEG/ICP/FENG/001 | Ensures engineering standards are set to ensure equipment reliability and minimise risks (including environmental risks). The engineering process defines engineering strategy and maintenance and outage requirements for plant and systems. | 4.6.1 4.8.2 | Engineers shall understand environmental impact of work, consider waste and resources. Engineers to engage early with regulators for planned design changes. Zero tolerance of defective environmental plant. | BEG/ICP/FENG/001 |
| | Engineering process will provide overview of delivery of the engineering strategy (i.e. system health, equipment integrity, failures, maintenance deferrals, investment, projects and improvement of the plant / systems). | | EMITs requirements for environmentally vulnerable / sensitive plant will be specified as part of engineering strategy (this will be embedded in processes by work management and delivered by maintenance process). | BEG/SPEC/SHE/ENVI/023 |
| | Engineering will plan activities to resolve any equipment performance / condition deficiencies. | | Contract Engineering Technical Specification (CETS) shall include consideration of appropriate environmental issues. | BEG/SPEC/FENG/019 |
| | Understand worst outcomes from an activity, perform adequate reviews / contingency preparations to mitigate / prevent those outcomes. | | | |

⁵ Note project management does not include fleet critical programmes or IT investment delivery.

| Process | How does the process support the Environmental Management System (EMS)? | BEG/ICP/SHE/017 Section | Key environmental controls required in process | Process Reference for Control |
|---|--|-------------------------|--|---|
| Procurement and Materials Management BEG/ICP/PRO/010 | Provide process and controls for securing services or goods from the supply chain. This process enables NGL requirements to be specified to the supply chain as appropriate to the services, works or goods. | 4.3.5 4.5.4 4.9.1 | Ensure that potential environmental risks arising from the supply chain are identified, assessed and controlled. This should include: <ul style="list-style-type: none"> • Assessment and control of approval of companies; • Specification of work, services and goods; and • Delivery of work, services and goods to ensure management of relevant environmental risks and delivery of environmental best practice standards. | BEG/ICP/PRO/010 BEG/SPEC/PRO/013 BEG/SPEC/PRO/019 |
| | Control supply chain resources required to enable delivery of an efficient and effective EMS. | 4.5.3 | N/A | N/A |

| Process | How does the process support the Environmental Management System (EMS)? | BEG/ICP/SHE/017 Section | Key environmental controls required in process | Process Reference for Control |
|---|---|-------------------------|--|---|
| Environmental Management BEG/ICP/SHE/017 | Establishes scope of the EMS and provides overview. | This ICP – all sections | As per section 4 of this document, relevant environmental management specific processes are: <ol style="list-style-type: none"> 1. Environment specific organisational context and stakeholder review; 2. Define EMS 3. Secure environmental specialist support; 4. Environmental Peer Groups; 5. Environment Process Risk Assessment: Context/Stakeholders, Aspects, Compliance obligations, BPM/BAT; 6. Environmental objectives, targets and transition plan; 7. Establish EMS actions / operational controls; 8. EMITs and ESPECs; 9. Performance monitoring; 10. Compliance evaluation; 11. Environmental oversight 12. Station / TSG Management Review | Refer to referenced section in Section 4 of this ICP: 4.1.1 4.1.2 4.2.3 4.2.4 / 4.2.5 4.3.2 / 4.9.1 4.4.2 / 4.4.3 / 4.9.1 4.4.1 / 4.6.1 / 4.9.1 4.7.2 4.8.2 / 4.9.1 4.8.3 / 4.9.1 4.8.6 / 4.9.1 4.8.8 / 4.9.1 |
| Fire Safety BEG/ICP/FIRE/001 | N/A directly, however fire safety principles (e.g. minimisation of combustible materials and good housekeeping will also support good environmental standards). | N/A | N/A | N/A |

| Process | How does the process support the Environmental Management System (EMS)? | BEG/ICP/SHE/017 Section | Key environmental controls required in process | Process Reference for Control |
|--|--|-------------------------|--|--|
| Emergency Preparedness BEG/ICP/OPSV/EPG/001 | Provides process and controls for ensuring emergency preparedness and response. | 4.6.2 | Include controls to ensure preparedness and response to emergencies which may have an impact on the environment. | Emergency Preparedness BEG/ICP/OPSV/EPG/001 |
| Radiation Protection BEG/ICP/SHE/016 | Management and controls of radioactive sources will protect environment. | 4.6.1 | N/A | N/A |
| | Clearance procedures and control of materials/tools and equipment entering the controlled areas will support waste hierarchy. | | | |
| Industrial Health and Safety Management BEG/ICP/SHE/IND/001 | Establishes processes for task related risk assessment and Time Out for Personal Safety | 4.3.4 | Incorporate task related environmental risk assessment. | BEG/SPEC/SHE/COP/016 |
| | Establishes Code of Practice which specifies minimum requirements for contractors. | 4.3.5 4.6.1 | Incorporate environmental requirements. | BEG/SPEC/SHE/COP/004 |
| | Specifies COSHH process / controls which also has environmental implications. | 4.6.1 | N/A | N/A |
| Management of Security BEG/ICP/SEC/ORG/001 | Security of facilities. | 4.6.1 | N/A | N/A |
| Document Control BEG/ICP/DM/003 | Specifies process for developing and controlling documents (including those required to support the EMS). | 4.5.2 | N/A | N/A |
| | Ensures access to current version of controlled documents by employees and those working on our behalf. | 4.5.5 | N/A | N/A |
| | Ensures process standards are subject to periodic review (this will ensure requirements remain appropriate to the risk posed). | 4.7.2 | N/A | N/A |

| Process | How does the process support the Environmental Management System (EMS)? | BEG/ICP/SHE/017 Section | Key environmental controls required in process | Process Reference for Control |
|--|--|----------------------------------|--|-------------------------------|
| Records Management BEG/ICP/DM/006 | Specifies process for control of records (including those required to be maintained to deliver an effective EMS and to demonstrate the EMS achieves the intended outcome). | 4.5.2 | N/A | N/A |
| Information Management BEG/ICP/IM/001 | Security of information and access. | N/A | N/A | N/A |
| Organisational Learning BEG/ICP/OL/001 See Note ⁶ | Provides the corrective action programme (CAP) and operational experience (OPEX) processes which: <ul style="list-style-type: none"> • Enable recording, investigation and tracking of corrective / preventive actions in the event of identification of potential or actual adverse conditions (including those with potential impact on the environment); • Support performance monitoring; • Enable communication of relevant environmental issues to employees; | 4.5.5 4.8.2 4.9.1 4.9.2 | N/A | N/A |
| | Provides Functional Self Assessment and Benchmarking processes (which will be used for environmental oversight). | 4.8.6 4.9.1 | N/A | N/A |
| Communications BEG/ICP/COMM/001 | Establishes processes for communications to employees, those working on our behalf and community liaison (including communication of environmental issues). | 4.5.5 | N/A | N/A |

⁶ CAP and Self Assessment (BEG/ICP/OPSV/CAP/001) and OPEX (BEG/ICP/OPSV/OPEX/001) have been superseded by the Organisational Learning Process as of 31/12/2016.

| Process | How does the process support the Environmental Management System (EMS)? | BEG/ICP/SHE/017 Section | Key environmental controls required in process | Process Reference for Control |
|---|--|----------------------------------|---|---|
| Human Resources BEG/ICP/HR/006 | Provides process to secure and control human resources (this includes those required to deliver an efficient and effective EMS). | 4.5.3 4.5.4 | N/A | N/A |
| Nuclear Professionalism BEG/ICP/OPS/014 | Establishes human performance error prevention tools (BEG/SPEC/OPS/HU/003) and includes pre job brief and post job debrief (BEG/SPEC/OPS/HU/005), these will ensure awareness of risks and controls relevant to work (including environmental issues). | 4.3.4 4.5.4 4.5.5 4.9.1 | N/A | N/A |
| Systematic Approach to Training BEG/ICP/TRNG/001 | Assesses competence requirements and determines required education, training or experience to deliver this. | 4.5.4 | N/A directly, however training requirements for environment specific roles are specified for: <ul style="list-style-type: none"> • GEM • Station ESG Relevant environmental requirements appropriate to all other roles will be within relevant TPD, PTP and RTP. | BEG/TRNG/TPD/617/01 Training Programme Description – ERO Environment Officer BEG/TRNG/TPD/203/ADDEND/01 TPD Addendum – Environmental Safety Engineer |
| | Requires training records and competence records to be maintained. | 4.5.4 | N/A | N/A |
| Decommissioning BEG/ICP/NFL/001 | Establishes end of life activities for nuclear power stations. | 4.6.1 | Ensure potential environmental implications associated with the decommissioning and end of life for nuclear power stations are considered and controlled. | TBC |

Appendix B Summary of NGL Arrangements Supporting the EMS

| Section of BEG/ICP/SHE/017 | | NGL Arrangements to Deliver Requirements |
|------------------------------|---|---|
| 2 | Scope of the NGL EMS | |
| 2.1 | Scope of the EMS | <ul style="list-style-type: none"> – BEG/ICP/SHE/017 Environmental Compliance (defines scope) – BEG/SPEC/MSM/003 documents how NGL complies with 14001 |
| 4.1 | Understanding NGL Environmental Context | |
| 4.1.1 | Organisation context and needs / expectations of interested parties | <ul style="list-style-type: none"> – BEG/MSM/001 Management System Manual (identifies context and stakeholders) – BE/ICP/GOV/001 Governance Process (identifies context and stakeholders) – ERO/REP/0162/GEN Environmental Organisational Context and Key Stakeholders (assesses how EMS addresses context and stakeholder needs) – BEG/SPEC/SHE/ENVI/002 Environmental Legislation and Obligations (incorporates obligations arising from stakeholder assessment) |
| 4.1.2 | Define the EMS | <ul style="list-style-type: none"> – BEG/MSM/001 Management System Manual (embeds EMS within NGL) – BEG/ICP/SHE/017 Environmental Compliance (defines and describes EMS) |
| 4.2 | Leadership, Organisation and Policy | |
| 4.2.1 | Leadership and commitment | <ul style="list-style-type: none"> – BEG/MSM/001 Management System Manual (establishes senior management responsibilities) – BE/ICP/GOV/001 Governance Process (establishes senior management responsibilities) |
| 4.2.2 | Environmental policy | <ul style="list-style-type: none"> – BE/POL/009 (EDF-POL-ENV-003) Environment Policy – BEG/MSM/001 Management System Manual (adopts policy for NGL) – BEG/ICP/SHE/017 Environmental Compliance (ensures implementation of policy in NGL) |
| 3 4.2.3 4.2.4 4.2.5 | Organisation, roles, responsibilities and authorities | <ul style="list-style-type: none"> – BEG/MSM/001 Management System Manual (sets requirements for environment process owners/fleet managers) – BEG/ICP/SHE/017 Environmental Compliance (sets requirements, establishes environmental peer groups, maps interfaces between group, identifies key responsibilities for the EMS) |
| 4.3 | Environmental Risk Management | |
| 4.3.1 | Actions to address risks and opportunities | <p>Key processes which support environmental risk assessment and management are identified in Sections 4.3.2 to 4.3.7 below, in addition the following also support risk assessment and management:</p> <ul style="list-style-type: none"> – BEG/MSM/001 Management System Manual (process owner responsibilities) – BEG/ICP/GOV/001 Governance (responsibilities to comply with statutory obligations) – BEG/SPEC/FENG/003 Plant Walk Downs – BEG/SPEC/SHE/COP/008 Construction, Design and Management. Outage and Projects Health and Safety – BEG/SPEC/OPS/HU/002 Task Observation and Coaching – BEG/SPEC/HR/023 Working Time and Control of Worker Fatigue – BE/SPEC/HR/OH/013 Stress and Wellbeing at Work |
| 4.3.2 | Environmental risk assessment processes | <ul style="list-style-type: none"> – ERO/REP/0162/GEN Environmental Organisational Context and Key Stakeholders (context and stakeholder risks) – BEG/SPEC/SHE/011 Aspects Process (risks relating to systems, plant, activities) – BEG/SPEC/SHE/ENVI/002 Environmental Legislation and Obligations (risks arising from legislation and other compliance obligations) – BEG/SPEC/SHE/ENVI/021 BAT / BPM (risks associated with operational and radioactive waste management activities) |

| Section of BEG/ICP/SHE/017 | | NGL Arrangements to Deliver Requirements |
|----------------------------|---|---|
| 4.3.3 | Risk and asset management and business planning | <ul style="list-style-type: none"> – BEG/ICP/API/001 Risk Management (plant and business risks) – BEG/SPEC/API/102 Risk Management System / NG Risk Log – BEG/ICP/API/003 Asset Planning (interfaces with risk log to manage risks) – BEG/ICP/BUS/001 Business Planning (plans to mitigate risks) |
| 4.3.4 | Work prioritisation and management | <ul style="list-style-type: none"> – BEG/ICP/WM/001 Online Work Management – BEG/SPEC/SHE/COP/016 Risk Assessment – BEG/ICP/OPS/014 Nuclear Professionalism Programme – BEG/SPEC/OPS/HU/005 Setting to Work, Pre-Job Briefs and Post-Job Debriefs |
| 4.3.5 | Supply chain risks | <ul style="list-style-type: none"> – BEG/ICP/PRO/010 Procurement – BEG/SPEC/SHE/COP/004 HSE Requirements for Contractors |
| 4.3.6 | Projects | <ul style="list-style-type: none"> – BEG/ICP/PD/001 Project Management – BEG/FORM/PD/023 Investment Delivery Environmental Aspect / Impact and Waste Management Assessment Form |
| 4.3.7 | Engineering change Maintain Design Integrity | <ul style="list-style-type: none"> – BEG/ICP/DAO/001 Maintain Design Integrity – BEG/FORM/SHE/ECA/035 Environmental safety and LC34 Compliance |
| 4.4 | Environmental Actions and Objectives | |
| 4.4.1 | Environmental actions and planning | <ul style="list-style-type: none"> – Delivered via the risk assessment processes in 4.3 above and transition plan / objectives and targets in section 4.4.2 |
| 4.4.2 | Environmental objectives and planning to achieve them Monitoring delivery against plan | <ul style="list-style-type: none"> – BEG/ICP/OPS/011 Fleet Performance Management through the Fleet Approach (KPI / strategic objectives) |
| 4.4.3 | | <ul style="list-style-type: none"> – BEG/ICP/SHE/017 Environmental Compliance (Set transition plan, objectives and targets and monitor progress) – BEG/ICP/BUS/001 Business Planning (embeds work / actions) |
| 4.5 | Support Arrangements | |
| 4.5.1 | Introductory section | N/A |
| 4.5.2 | Documents and Records | <ul style="list-style-type: none"> – BEG/ICP/DM/003 Document Control – BEG/ICP/DM/006 Records Management – BEG/SPEC/DM/004 Document Control – BEG/ICP/SHE/017 Environment Compliance (sets requirements for EMS documents) |
| 4.5.3 | Resources | <ul style="list-style-type: none"> – BEG/MSM/001 Management System Manual (responsibilities for provision of resources) – BEG/ICP/SHE/017 Environmental Compliance (environment specific resource) – BEG/ICP/HR/006 Management of Human Resources – BEG/ICP/HR/MOC/001 Management of Change – BEG/ICP/API/003 Asset planning – BEG/ICP/FIN/001 Financial Control – BEG/ICP/PRO/010 Acquire Goods and Services standard |
| 4.5.4 | Competence and Training | <ul style="list-style-type: none"> – BEG/ICP/TRNG/001 Systematic Approach to Training (EDF Energy SQEP) – BEG/ICP/HR/006 Management of Human Resources – BEG/ICP/OPS/014 Nuclear Professionalism Programme – BEG/ICP/PRO/010 Procurement Process (Control contractor SQEP) – BEG/SPEC/SHE/COP/004 HSE Requirements for Contractors |

| Section of BEG/ICP/SHE/017 | | NGL Arrangements to Deliver Requirements |
|----------------------------|--|--|
| | | <ul style="list-style-type: none"> – BEG/SPEC/PRO/013 Model Enquiry Document – BEG/SPEC/TRNG/404 Training Committees – BEG/TRNG/TPD/617/001 GEM Environment Officer – BEG/TRNG/TPD/203/ADDEND/01 ESG Environmental Safety Engineer – Other RTP / PTP / TPD / QM as appropriate |
| 4.5.5 | Communication and Awareness | <ul style="list-style-type: none"> – BEG/ICP/COMM/01 Communication Process (general communications) – BEG/ICP/SHE/017 Environmental Compliance (peer group communications) – BEG/ICP/TRNG/001 Systematic Approach to Training (awareness) – BEG/MSM/001 Management System Manual (stakeholder communications) – BEG/ICP/OPS/014 Nuclear Professionalism Programme – BEG/SPEC/OPS/HU/005 Setting to Work, Pre-Job Briefs and Post-Job Debriefs – BEG/ICP/OL/001 Organisational Learning (CAP and OPEX) – BEG/ICP/DM/003 Document Control (ensure access to current version) – BEG/ICP/WM/001 Online Work Management (embed environmental requirements within work instructions and work management processes) – BEG/SPEC/SHE/010 Regulator Interactions – BEG/SPEC/SHE/004 Management of Safety Regulatory Correspondence – BEG/SPEC/SHE/COP/004 HSE Requirements for Contractors – ERO/PROC/016 GEM Reporting Procedure (reporting to stakeholders) |
| 4.6 | Develop EMS Controls | |
| 4.6.1 | Establish operational controls | <ul style="list-style-type: none"> – BEG/ICP/SHE/017 Environmental Compliance (sets requirements) – Appendix A and B identify key controls embedded in NGL processes – Appendix E identifies key controls embedded in NGL Environment Process |
| 4.6.2 | Emergency preparedness and response | <ul style="list-style-type: none"> – BEG/ICP/OPSV/EPG/001 Developing and Maintaining Emergency Arrangements |
| 4.7 | Implement and Maintain Controls | |
| 4.7.1 | Implement controls | <p>As per documents identified in:</p> <ul style="list-style-type: none"> – Appendix A and B identify key controls embedded in NGL processes – Appendix E identifies key controls embedded in NGL Environment Process |
| 4.7.2 | Maintain Controls | <ul style="list-style-type: none"> – BEG/SPEC/SHE/ENVI/023 Environmental Maintenance Inspection and Test Specification – BEG/SPEC/SHE/ENVI/022 Environmental Specifications – BEG/ICP/DM/003 Document Control |
| 4.8 | Monitoring and Performance Evaluation | |
| 4.8.1 | Introductory Section | <ul style="list-style-type: none"> – N/A |
| 4.8.2 | Performance monitoring | <ul style="list-style-type: none"> – BEG/ICP/OL/001 Organisational Learning (CAP) – BEG/ICP/OPS/011 Fleet Performance (KPIs) – BEG/SPEC/NOS/003 Performance Management Metrics (defines environmental indicators) – Controls in sections 4.6 and 4.7 above include monitoring where appropriate – ERO/PROC/016 GEM Reporting |

| Section of BEG/ICP/SHE/017 | | NGL Arrangements to Deliver Requirements |
|----------------------------|-------------------------------------|---|
| 4.8.3 | Evaluation of compliance | – BEG/SPEC/SHE/ENVI/036 Evaluation of Compliance |
| 4.8.4 | Internal audit | – BEG/ICP/QUA/005 Independent Assessment – BEG/SPEC/QUA/020 Management System Auditing – BEG/SPEC/QUA/021 Audit Programme |
| 4.8.5 | Internal controls | – BEG/SPEC/GOV/002 Internal Controls |
| 4.8.6 | Self assessment / oversight | – BEG/ICP/OL/001 Organisational Learning (Self Assessment and Oversight) |
| 4.8.7 4.8.8 | Management review | – BEG/SPEC/MSM/001 Process Management (Management review) – BEG/SPEC/GOV/001 Delivery Team Specification and Terms of Reference (Fleet Management Review) – BEG/ICP/SHE/017 Environment Compliance (Station / TSG management review) – BEG/ICP/OPS/011 Fleet Performance Management – BE/ICP/GOV/001 Governance Process (Internal controls) |
| 4.9 | Improvement | |
| 4.9.1 | Improvements | – As per sections 4.3, 4.4 and 4.8 above |
| 4.9.2 | Nonconformity and corrective action | – BEG/ICP/OL/001 Organisational Learning – BEG/SPEC/SHE/ENVI/015 Environmental Event Categorisation |

Appendix C Internal Controls

The internal controls identified are designed to assure compliance with the ISO 14001 standard which in-turn provides assurance that the environmental risk associated with NGL sites is managed and low.

| | |
|-------------|--|
| Risk 1 | Operations are carried out in an uncontrolled manner leading to a significant adverse environmental consequence |
| Control 1.1 | NGL has a clear understanding of the organisational context and key stakeholders relevant to the EMS and the associated issues. These are considered in planning of the EMS. (GEM) |
| Test 1.1A | Has an assessment of context and stakeholders been undertaken and is this reviewed on a routine basis? |
| Control 1.1 | Station's management system certified to ISO 14001 (All locations) |
| Test 1.1A | Current ISO 14001 certificate displayed at station |

| | |
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| Risk 2 | Compliance with 'Legal and Other' requirements not defined and not embedded in company processes |
| Control 2.1 | Legal and other environmental requirements are identified and communicated to the correct audience |
| Test 2.1A | Have changes to legislation been reviewed on a monthly basis and is applicability to NG is understood? Have these been communicated to site ECC's on a monthly basis via the legislation brief? (GEM) |
| Test 2.1B | Have impacts of legislation listed in monthly brief have been reviewed and changes initiated using form BEG/FORM/SHE/ENVI/001 and any actions have been placed on AMS to track completion of requirements? (Station) |
| Test 2.1C | Is the NGL Register of Legislation updated on a 6 monthly basis to keep company documentation in step with applicable changes? |
| Control 2.2 | Environmental legislation is assessed as high, medium and low risk. Company Specifications are written to set down the requirements of high risk legislation. These specifications are kept in-step with legislation changes and are reviewed in-line with document management process. (GEM) |
| Test 2.2A | Is all legislation identified as high, medium or low risk? |
| Test 2.2B | Are company specifications available for all high risk legislation? |
| Test 2.2C | Are company specifications changed as a result of legislation changes identified within legislation briefs, with required changes recorded in AMS? |
| Test 2.2D | Are company documents reviewed and updated on a periodic process in-line with company document management process? |
| Test 2.2E | Are legislation requirements implemented in local documentation at each site |

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| Risk 3 | NGL sites not-compliant with Environmental Legislation potentially leading to an event with an adverse impact on the environment |
| Control 3.1 | The site actively engages with local stakeholders on environmental matters Give an account of interactions: (Station) |
| Test 3.1A | Has the site <ul style="list-style-type: none"> a) Recorded and responded to complaints? b) Held site Stakeholder Groups/ Local Community Liaison Committee? c) Other links with local stakeholders? |

| | |
|-------------|--|
| | (Station) |
| Control 3.2 | An effective internal and external audit programme is in place. (Station) |
| Test 3.2A | What is the status of the a) internal and b) external audit programme i.e. ahead of plan, on plan or behind plan (Station) |
| Control 3.3 | Have minor and major non-conformances identified by the external auditor been a) shared with the rest of the fleet? b) tested for relevance to your site? c) subject to follow-on actions to prevent a repeat finding (Station) |
| Test 3.3A | Operational sites share and act upon the findings from external audits (Station) |

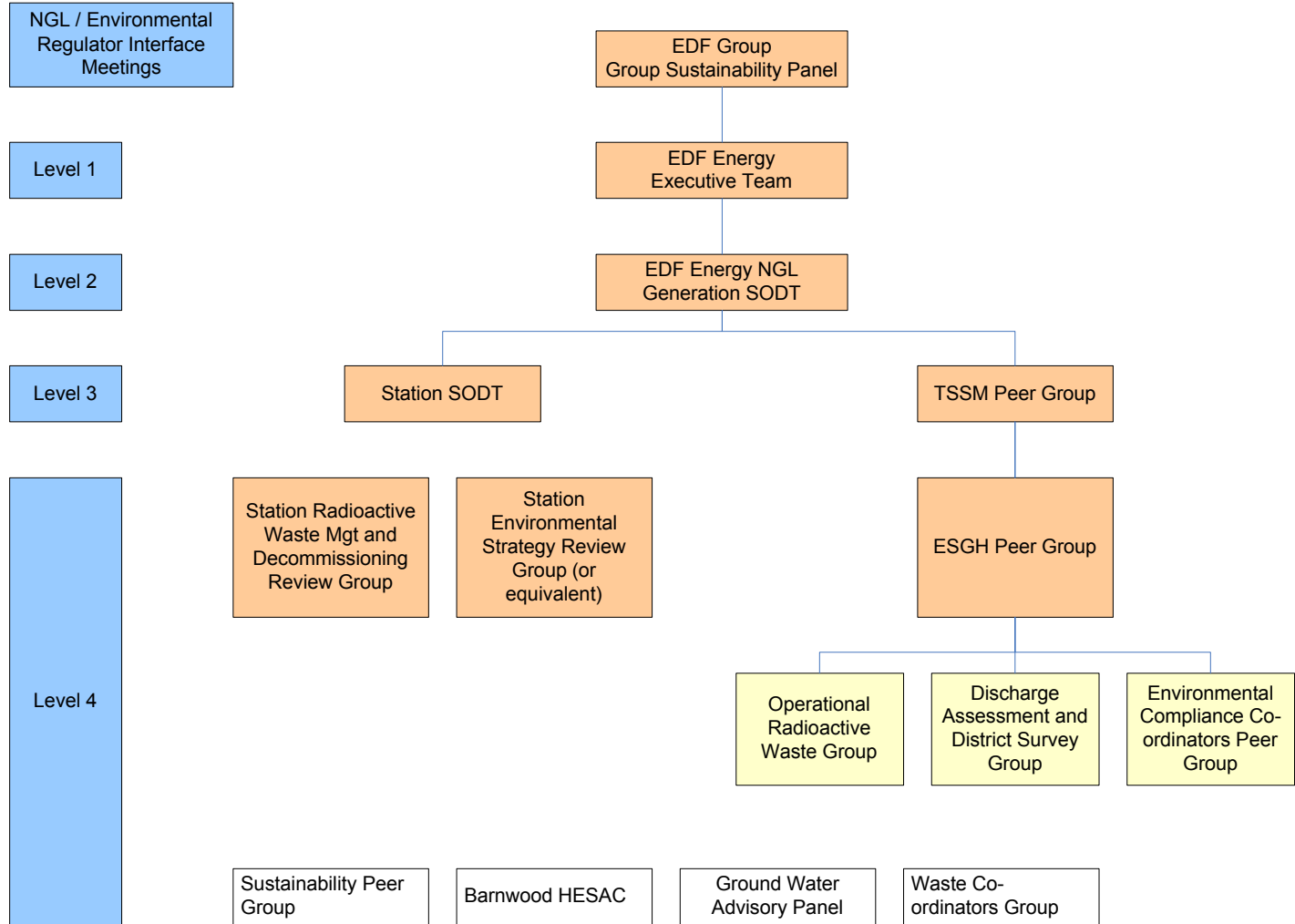
| | |
|-------------|--|
| Risk 4 | NGL sites do not maintain or manage their site Aspects register |
| Control 4.1 | All environmental impacts are scored and recorded in the site aspects register. (Station) |
| Test 4.1A | Have the aspects scores been updated on a quarterly basis with at least an annual review of all aspects. (Station) |
| Test 4.1B | Have BERL entries or ARs been raised to reduce the scores of the top ten aspects? (Station) |
| Control 4.2 | Aspects are updated on a quarterly and annual basis. (Station) |
| Test 4.2A | Is the aspects register up to date (Station) |

| | |
|-------------|---|
| Risk 5 | NGL sites do not seek to improve their performance. |
| Control 5.1 | Fleet improvement initiatives are defined within the 5 year fleet transition plan. (GEM) |
| Test 5.1A | Are fleet improvement initiatives defined within the environmental improvement plan? (GEM) |
| Control 5.2 | The Environment Strategy Review Group (or equivalent meeting) provides the management review of environmental performance. (Station) |
| Test 5.2A | a) was the meeting held on a quarterly basis b) was the meeting chaired by Plant manager c) what other managers were in attendance d) were adverse trends reviewed (Events or progress against objectives and targets)? e) were actions taken to address adverse trends? (Station) |
| Control 5.3 | Objectives and Targets are employed at the location as a means of achieving year on year improvement (Station) |
| Test 5.3A | a) What was the completion rate for objectives and targets in the previous year b) Have objectives and targets been defined and agreed for this current year? c) Are top aspects reflected in the objectives and targets d) Are progress with objectives and targets reported to the ESRG or equivalent quarterly meeting (Station) |

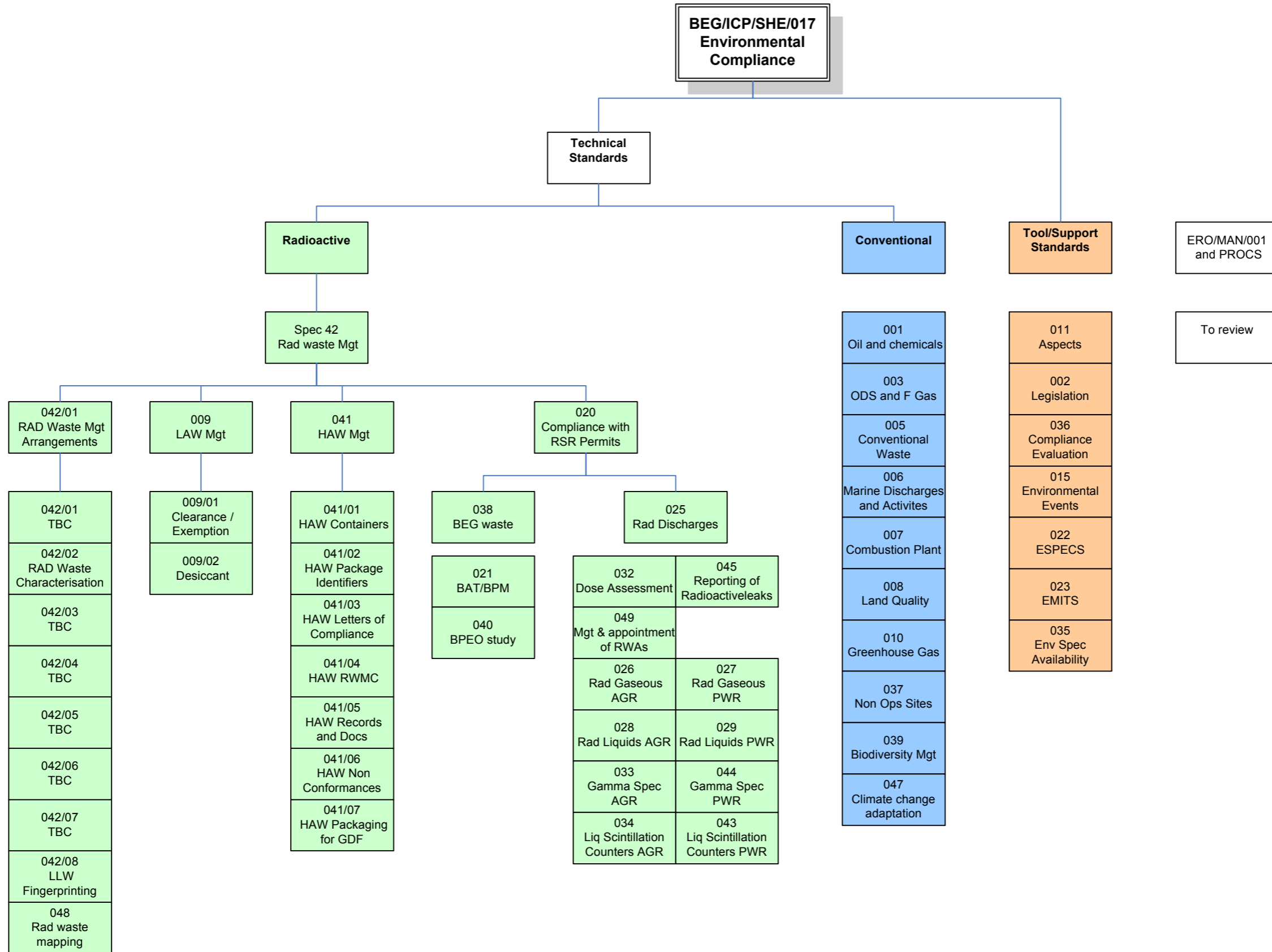
| | |
|-------------|--|
| Risk 6 | Operational controls required to assure compliance with Legal and other requirements not defined, implemented or fit for purpose |
| Control 6.1 | Environmentally sensitive plant is maintained in order to optimise performance and availability. |

| | |
|-------------|--|
| Test 6.1A | <p>a) Has the site fully implemented EMITS*?</p> <p>b) How many EMITS routines have been overdue in the past 12 months.</p> <p>* BEG/SPEC/SHE/ENVI/023 Preparation management and implementation of the environmental maintenance inspection and testing schedule (EMITS).</p> |
| Risk 7 | Waste is not managed in a manner that complies with relevant legislation |
| Control 7.1 | Non-hazardous waste is effectively managed on-site in accordance with legal requirements. (Station) |
| Test 7.1A | <p>a) what percentage of non hazardous waste has been recycled in the past 12 months (compare with the previous 12 months)</p> <p>b) have non-conformances with waste regulations been reported, investigated and corrective actions placed to prevent reoccurrence?</p> <p>(Station)</p> |
| Risk 8 | Redundant plant contains residual radioactivity which may leak or otherwise escape |
| Control 8.1 | Identify redundant plant that contains potentially mobile radioactivity (LC 34 Site Advisor) |
| Test 8.1A | <p>a) At what date was the plant/ system removed from service</p> <p>b) Has the plant's change of use been supported by an EC?</p> <p>c) Does the EC define maintenance, inspection and testing requirements that support the integrity of the barriers to leakage and escape?</p> <p>d) Has the making safe of the redundant plant e.g. removal of potentially mobile radioactive wastes or radioactive material been completed or programmed /resourced?</p> |

Appendix D Environmental Peer Groups



Appendix E NGL Environmental Process Specifications



Appendix F Management Review Terms of Reference

Management review shall ensure continued suitability, adequacy and effectiveness of the EMS and its deployment. The management review shall make decisions and take appropriate actions to address any adverse trends or inadequate performance identified.

The Management Review may be undertaken via the Station / TSG 'Environmental Strategy Review Group' or equivalent meeting to provide the appropriate top management review and challenge. (Note management review is also performed at a fleet level as per Section 4.8.7).

The Station / TSG Environmental Management Review shall encompass the following items:

- Actions from previous management reviews
- Changing circumstances which may impact on the EMS for example compliance obligations, organisational context, stakeholder needs, risks
- Trends in the significant Aspects within the station Aspects register
- Performance against Fleet KPIs
- Progress against Key Environmental Objectives & Targets
- Response to environmental events and investigations
- Non-conformances identified through audits
- Status of compliance with obligations via compliance evaluation output
- Status of EMIT routines and ESPEC compliance
- Regulatory issues both locally and corporately, including Regulatory Commitments log and significant communications
- Complaints received by the site
- Adequacy of resources for environmental management

A record of management review shall be maintained and significant actions arising shall be tracked using CAP within the Organisational Learning Process (BEG/ICP/OL/001).

Proposed duration 2 hours

Frequency of meetings shall be at least one every quarter.

Required attendance: where (Q) is required to be quorate and (I) is optional by invitation

- Plant Manager or equivalent Senior Manager (Q) - Chair
- Technical and Safety Support Manager (Q)
- Environmental Safety Group Head (Q)
- Engineering Manager (I)
- Operations Manager (I)
- Project / Investment Delivery Manager (I)
- Fuel Route Manager (I)
- Supply Chain (I)
- Independent Nuclear Assessment (INA) Site Inspector (I)
- Station Chemist (I)
- Environmental Compliance Co-ordinator (Q)
- GEM Environmental Focus Engineer (I)

Appendix G Process and Quality Indicators

Environmental process and quality indicators are as per Section 4.8.2 of this ICP.