

Sizewell C Project

# Radioactive Substances Regulation (RSR) Permit Application

# Appendix E

Support Document E2 – Management System Manual

Building better energy together

edfenergy.com

NNB Generation Company (SZC) Ltd. Registered in England and Wales. Registered No. 9284825. Registered Office: 90 Whitfield Street, London, W1T 4EZ.



SIZEWELL C PROJECT RSR PERMIT APPLICATION SUPPORT DOCUMENT E2 – MANAGEMENT SYSTEM MANUAL

## NOT PROTECTIVELY MARKED

This page has been intentionally left blank

Building better energy together

UNCONTROLLED WHEN PRINTED NOT PROTECTIVELY MARKED edfenergy.com



Company Document NOT PROTECTIVELY MARKED

# **NNB GENERATION COMPANY (SZC) LTD**

# **COMPANY DOCUMENT**

# **MANAGEMENT SYSTEM MANUAL**

© 2019 Published in the United Kingdom by NNB Generation Company (SZC) Limited as relevant (NNB GenCo), 90 Whitfield Street, London, W1T 4EZ. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, including photocopying and recording, without the written permission of the copyright holder NNB GenCo, application for which should be addressed to the publisher. Such written permission must also be obtained before any part of this publication is stored in a retrieval system of any nature. The electronic copy is the current issue and printing renders this document uncontrolled.

Building better energy together

edfenergy.com

NNB Generation Company (SZC) Limited Registered in England and Wales. Registered No. 09284825 Registered Office: 90 Whitfield Street, Page 1 of 31



This page has been intentionally left blank

Building **better energy** together

edfenergy.com

NNB Generation Company (SZC) Limited Registered in England and Wales. Registered No. 09284825 Registered Office: 40 Grosvenor Place

Page 2 of 31



## TABLE OF CONTENTS

TABL	E OF CONTENTS	3
1 11	ITRODUCTION	5
1.1	Scope	5
1.2	Requirements	5
1.3	Stakeholders	5
1.4	Accountability, Responsibility and Authority	6
1.5	References and Definitions	6
2 1	ITEGRATED MANAGEMENT SYSTEM COMPOSITION	8
2.1	Content	8
3 P	ROCESS FRAMEWORK	10
3.1	Process Levels	10
3.2	Process Categories	
3.2.1 3.2.2	Sub Business Processes	
3.2.2	Procedures	
3.3	Process Interaction	
3.4	Outsourced / Contracted Processes	12
3.5	IMS Governance	12
3.6	Management System Governance Group	13
3.6.1	Responsible Manager	13
3.6.2	Process User	
3.6.3 3.6.4	Procedural Use and Adherence Procedure Review Periods	
3.0.4		
4 L	EVELS OF PROCESS	15
4.1	Management Processes	
	Safety Leadership & Management	
4.1.2	Governance	
4.1.3 4.1.4	Business Planning & Investment	
4.2	Core Processes	
4.2.1 4.2.2	Project Management Design	
4.2.2	Procure	
4.2.4	Manufacture	
4.2.5	Construct	
4.2.6	Commission	21
		edfenergy.com

#### Building **better energy** together

NNB Generation Company (SZC) Limited Registered in England and Wales. Registered No. 09284825 Registered Office: 40 Grosvenor Place

Page 3 of 31



4.2.7 4.2.8	Operate Decommission	22
4.2.9	Consents, Permits & Licences	
	Support Processes	
4.3.1	Documents & Records	
4.3.2	People	
4.3.3	Training & Qualification	
4.3.4	Communications	25
4.3.5	Finance	
4.3.6	Information Management	26
4.3.7	Properties & Facilities	26
Appen	dix A	27
A1. De	finitions	27
A1.1.	Policy	27
A1.2.	Policy Practice & Guidelines	27
A1.3.	Executive Committee Terms of Reference	27
A1.4.	Process Group and Process	27
A1.5.	Procedures	27
A1.6.	Work Instruction	28
A1.7.	Business Forums Terms of Reference	28
A1.8.	Specification	28
A1.9.	Standard	28
A2. De	scription of Elements	28
A2.1.	Organisational Note	28
A2.2.	Manual	28
A2.3.	Briefing	29
A2.4.	Guide	29
A3. Ov	vnership	29
A3.1.	Process Owner	29
A3.2.	Process Lead	29
A3.3.	Policy Owner	30
A3.4.	Policy Lead	30
A3.5.	Legislation Category Owner	30
A3.6.	Legislation Category Lead	31



## 1 INTRODUCTION

## 1.1 Scope

This Management Systems Manual explains how the management processes for NNB GenCo (SZC) are to be implemented. It describes the Integrated Management System (IMS) which is the tool used to ensure NNB GenCo (SZC) is able to act as an intelligent customer to design, procure, construct, commission, operate and eventually decommission Sizewell C nuclear power plant. This will be executed safely and reliably to quality, time and cost in accordance with the Company Manual (Ref. 1) the Nuclear Baseline statement (Ref 2) and the company Quality Policy (Ref 3).

## 1.2 Requirements

The IMS satisfies and demonstrates compliance with applicable laws and regulation as well as with the following international standards:

- IAEA Safety Requirements GSR-2 -Leadership for Management and Safety (Ref. 4);
- BS EN ISO 9000:2015- Quality Management Systems (Ref. 5);
- BS EN ISO 14001:2015 Environmental Management Systems (Ref. 6);
- BS EN ISO 45001:2018 Occupational Health and Safety Management Systems; (Ref. 7).
- Nuclear Site Licence Conditions (Ref. 8); and
- Environmental Permitting Regulations (Ref. 9).
- Guided by BS EN ISO/IEC 27001 Information Security (Ref. 10).

## 1.3 Stakeholders

Stakeholder requirements will be incorporated into the activities and interactions of the processes and procedures within the Integrated Management System. These include;

- owners and investors who expect high standards of safety and a return on investment;
- customers who in the current pre-operational phase of the project are our owners;
- the public and communities within which we operate who expect safe and environmentally sound operation and good corporate citizenship;
- employees who expect trust, recognition and reward and who contribute to and share in NNB GenCo (SZC)'s success and whose training, development and participation will promote that success;
- regulators who expect safe, secure and environmentally sound build, operation and decommissioning;
- World Association of Nuclear Operators



- HM government who expect us to provide safe reliable energy;
- Pressure groups and Non-Government Organisations who expect us to engage with them;
- The Responsible Designer who expect us to succeed and want to have a good relationship with us;
- Suppliers of equipment or services (e.g. reactors, components, fuels, fuel cycle services etc.) who expect us to succeed and want to have a good and profitable relationship with us;
- The media who expect timely, open and honest information;
- Trades Unions who expect us to provide open and fair working relationships with our employees and suppliers.

## **1.4** Accountability, Responsibility and Authority

The Finance Director is responsible for ensuring that the IMS is effective in meeting the business objectives, and will ensure that:

- The development, implementation and continual improvement of the Integrated Management System is maintained,
- the performance of the Integrated Management System, including its influence on safety and safety culture is monitored,
- customer requirements are addressed throughout the organisation,
- conflicts between customer requirements and the processes of the IMS are resolved; and
- performance and compliance is assured through a programme of independent assessment.

NNB GenCo (SZC) will retain overall responsibility for the Integrated Management System in accordance with the Intelligent Customer policy (Ref 11).

## 1.5 References and Definitions

Ref	Title	Location	NNB Document No.
1	NNB GenCo (SZC) Company Manual	EDRMS	100200192
2	NNB GenCo (SZC) Nuclear Baseline Statement	EDRMS	100200200
3	NNB GenCo (SZC) Quality Policy El		100200187
4	IAEA, Leadership and Management for Safety, IAEA Safety       External       https://www-pub.iaea.org/MTCD/Publicat         Requirements No. GSR-Part 2, 2016       website       ons/PDF/Pub1750web.pdf		
5	BS EN ISO 9000:2015 Quality Management Systems Requirements	External Website	https://www.iso.org/standard/ 45481.html



Ref	Title	Location	NNB Document No.
6	BS EN ISO 14001:2015 Environmental Management Systems – Requirements with guidance for use	External Website	https://www.iso.org/standard/ 60857.html
7	BS EN ISO 45001:2018 Occupational Health and Safety – Requirements with guidance for use	External Website	https://www.iso.org/iso- 45001-occupational-health- and-safety.html
8	ONR Nuclear Site Licence Conditions	External Website	http://www.onr.org.uk/silicon. pdf
9	Environmental Permitting (England and Wales) Regulations 2010	External Website	http://www.legislation.gov.uk/ ukdsi/2010/9780111491423/ contents
10	BS EN ISO/IEC 27001: 2005 Information Technology – Security Techniques – Information Security Management Systems – Requirements	External Website	https://www.iso.org/standard/ 54534.html
11	NNB GenCo (SZC) Ltd Intelligent Customer Policy	EDMRS	100200193

Term / Abbreviation	Definition
EDRMS	Electronic Documents & Records Management System
EPC	Engineering, Procurement & Construction
EPR™	The Pressurised Water Reactor developed and trademarked by AREVA
GDA	Generic Design Assessment
GL	General Ledger
HPC	Hinkley Point 'C'
HSE	Health and Safety Executive
IAEA	International Atomic Energy Agency
IMS	Integrated Management System
INSAG	International Nuclear Safety Advisory Group
ІТ	Information Technology
MSM	Management System Manual
NNB GenCo	NNB Generation Company (HPC) Limited and NNB Generation Company (SZC) Limited
NSL	Nuclear Site Licence
ONR	Office for Nuclear Regulation
ONR(CNS)	Office for Nuclear Regulation (Civil Nuclear Security)
RSR	Radioactive Substances Regulations
Safety	Includes nuclear, radiological, industrial, environmental, health and security related safety
SZC	Sizewell C
PEP	Project Execution Plan

#### Building better energy together

edfenergy.com

NNB Generation Company (SZC) Limited Registered in England and Wales. Registered No. 09284825 Registered Office: 40 Grosvenor Place



## 2 INTEGRATED MANAGEMENT SYSTEM COMPOSITION

The IMS integrates structure, resources and processes into one coherent system to enable the organisation's objectives to be achieved. The Management System Manual documents and describes how the IMS achieves its objective with a specific focus on processes and procedures.

The IMS sees increasing level of detail down through the system from the strategic apex to the lowest level of business activity, and provides increasing levels of understanding from the top level frameworks to detailed explanation provided in guidance documents.

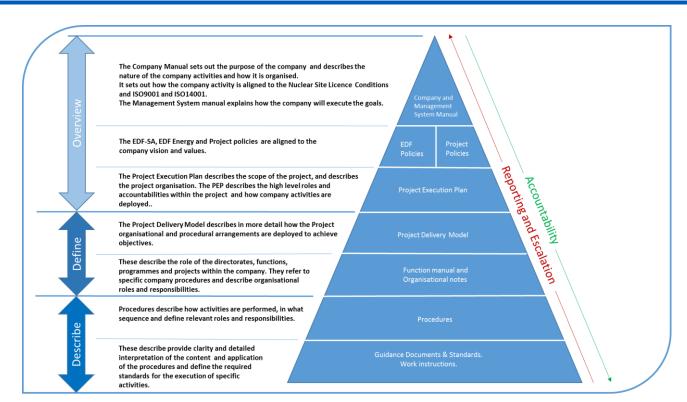
## 2.1 Content

The structure comprises of seven layers, which provide increasing levels of detail as one descends through these levels. The top three levels define the strategic apex of NNB GenCo (SZC). The bottom four levels define the core operational processes, which are designed around the business objectives.

The key elements of the IMS hierarchy (Figure 1) can be categorised as:

- **Overview (Framework)** presents the overall structure of the Company's management arrangements, established on the behalf of and approved by the Managing Director and the Executive Team.
- **Define (What)** These describe what is expected or what is to be undertaken and enable people to be put to work by providing a clear explanation of what is required.
- **Describe (Why & How)** These parts provide context and detail to enable individuals to understand what is expected and why, along with more detailed explanations and guidance on how to undertake activities.







Building better energy together

edfenergy.com



## **3 PROCESS FRAMEWORK**

## 3.1 Process Levels

Three process categories exist within the framework, these shown below in Figure 2 below, and are:

- **Management Processes** drive, govern and assure all other processes within the framework.
- **Core Processes** deliver the organisations key products and services.
- Support Processes are enablers for the core and management processes.

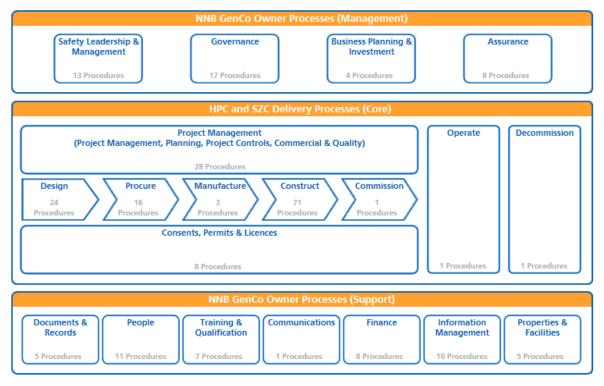


Figure 2 NNB GenCo (SZC) Process Groups

## 3.2 Process Categories

Process categories sub-divide into process groups which provide a view of the key activities the company needs to meet its business objectives in a controlled and effective way. Figure 3 below demonstrates the "construct" process group. Definition of a process requires a number of key attributes to be captured, these include

Building **better energy** together

edfenergy.com

NNB Generation Company (SZC) Limited Registered in England and Wales. Registered No. 09284825 Registered Office: 40 Grosvenor Place

Page 10 of 31



- Goal of the process
- Business owner
- Process performance indicators
- Risks and controls

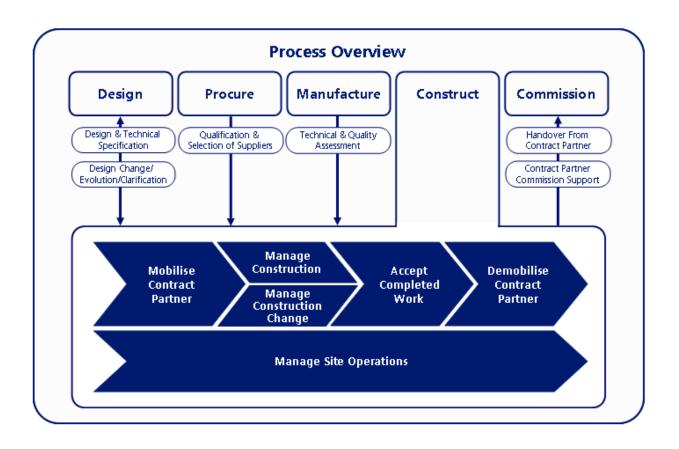


Figure 4 Example of the "Construct" Process Group.

## 3.2.1 Sub Business Processes

In some instances, due to complexity or scale of activities, it is necessary to break a business process down further, these sub-business processes are not described within this document.

## 3.2.2 Procedures

Processes are executed by procedures, which describe how to consistently and accurately undertake a particular activity to deliver the required outcome. They capture step by step instructions and are used to assure effective and safe working practices are in place. These procedures may be any of the following type:

• Company Procedure

edfenergy.com

Building **better energy** together

NNB Generation Company (SZC) Limited Registered in England and Wales. Registered No. 09284825 Registered Office: 40 Grosvenor Place



- SZC Site Safety procedure
- Contractors Handbook Procedure
- Operational Procedure

Company Procedures are themselves developed using procedures to ensure consistency;

## 3.2.3 Work Instruction

A work instruction is a step-by-step guide to performing an activity within a procedure e.g. how to enter data in a system. Work instructions are developed and managed by the team responsible for performing the task.

## 3.3 **Process Interaction**

To ensure effective interaction between interfacing processes, the IMS will allow NNB GenCo (SZC) to:

- Document the inputs and outputs between processes, the providers and the recipients, the responsibilities and the method of data or product transfer;
- Ensure effective communication and understanding between all process stakeholders;
- Apply controls to ensure the effectiveness of process interactions;
- Monitor and review process performance through day to day monitoring and periodic self and independent assessment including process interaction assurance; and
- Improve process interactions where non-conformances and preventive actions have been identified.

## **3.4 Outsourced / Contracted Processes**

NNB GenCo (SZC) retains overall responsibility for outsourced processes and retains controls over these processes. The controls have been defined using the guidelines of IAEA GSR 2 (Ref.4) and the requirements for NNB GenCo (SZC) as a nuclear site licensee to act as an Intelligent Customer.

The requirements for, and controls on, the outsourced processes for Tier 1 construction contractors are described in their relevant contracts and supporting contract appendices as well as NNB GenCo (SZC) company procedures where a required input from, or output to, an external Contractor is defined.

## 3.5 IMS Governance

Building **better energy** together

Governance arrangements are in place to ensure the integrity and quality of the IMS is maintained and that the organisation has processes and procedures in place that are suitable and effective in delivering the Company's objectives.

NNB Generation Company (SZC) Limited Registered in England and Wales. Registered No. 09284825 Registered Office: 40 Grosvenor Place

Page 12 of 31



## 3.6 Management System Governance Group

The Management System Governance Group is responsible for day to day governance of the Management System, including:

- Monitoring Management System metrics to identify weaknesses and significant risks and act accordingly.
- Maintaining oversight of the forward plan for Management System development and improvement
- Reviewing individual arrangements where greater governance is required e.g. when developing safety critical arrangements or companywide documents that may have a large impact.
- Monitoring compliance with agreed international standards and associated accreditation and identify and initiate actions to address any compliance issues with licences and permits.

## 3.6.1 Responsible Manager

The primary responsibility of the responsible manager is to ensure company procedures can and are being used by their team and that staff are trained and competent.

## 3.6.2 Process User

The process user must ensure they understand the appropriate procedure, inform their responsible manager if they have any concerns with undertaking the associated activities and comply with what has been specified

## 3.6.3 **Procedural Use and Adherence**

The project has adopted a graded approach to procedural use and has created a framework for classifying procedures to reflect the potential impacts of work not being conducted to specification. All procedures have been classified using the framework described on Figure 4 below.



g S	Information Use	Activities usually administrative in nature, that do not involve physical activity or direct contact with plant equipment, are performed frequently and have no immediate consequences if performed improperly.
Increasing Risk Levels	Reference Use	Activities for which the consequences of an improper action are not immediate and are not irreversible.
	Continuous Use	Activities for which the consequences of an improper action could have an immediate, possibly irreversible adverse impact on Safety, where Safety includes nuclear, radiological, industrial, environmental, health and security related safety.
Varying isk Levels	Multi Use	Activities for which sections or subsections designate different levels of use (reference and continuous) may be classified as multiple use

#### Figure 4 NNB GenCo (SZC) Procedural Use & Adherence Classifications

In addition, a number of procedure adherence expectations for managers and staff have been defined and been included in mandatory training provided to all staff.

- Responsible Managers are clear which procedures are core to their team's operation and which their staff should be competent in using;
- Responsible Managers ensure this information and the importance of procedure use and adherence is communicated to new staff (permanent and embedded contractors) and reinforced on an ongoing basis;
- Staff are walked through / supervised / monitored during their first executions of the procedures to ensure they fully understand the procedure requirements, supporting documents, systems and controls employed;
- Responsible Managers communicate changes to procedures, provide training and revalidate competence when required.
- Responsible Managers promote the need to raise non-conformances when a procedure is clearly not being followed or the expected business outcome is not achieved, and to raise learning reports if the process is deficient.
- All users are expected to propose improvements via the organisational learning system.

## 3.6.4 **Procedure Review Periods**

To ensure company procedures (and some other specific documents) are regularly reviewed to ensure they meet the needs of the project, a maximum period of 3 years between reviews of procedures is in place. The 3-year review period is monitored by the Management System Governance Group.



## 4 LEVELS OF PROCESS

This section describes in more detail the three process categories and their objectives as below;

- Management Processes
- Core Processes
- Support Processes

## 4.1 Management Processes

The management processes give direction and assurance on the core and support processes. Some management processes support NSL, environmental permits or international standards requirements. The project management processes, their objectives and descriptions are as below:

## 4.1.1 Safety Leadership & Management

**Process Group Objective:** To ensure the safety of the public and workforce through robust safety arrangements and a strong safety culture. (Safety includes nuclear, radiological, industrial, environmental, health and security related safety).

**Process Group Description & Scope:** To identify safety requirements and establish and implement the safety strategies to drive decision making across the organisation. To continually assess and improve safety performance through appropriate leadership.

#### **Component Business Processes:**

- Identify Safety Requirements identify and establish compliance with all safety related legislation and regulatory requirements applicable;
- Establish Safety Objectives & Targets define the Safety objectives for the project and our supply chain; set, communicate and regularly review Safety targets;
- Establish & Implement Safety Strategies develop strategies to deliver the systems, controls, values and behaviours required to achieve our Safety objectives, regularly reviewing their performance, adjusting to improve their effectiveness and modifying to incorporate changes to legislation and business need;
- Assess Safety Performance review Safety performance, through evaluations, performance reviews, self-assessments, benchmarking, incident investigation and appraisal of external experiences, identifying action plans to improve the robustness and effectiveness of the Safety arrangements; and
- Improve Safety Performance facilitate continuous improvement whilst supporting a healthy safety culture through reporting commendable and non-commendable internal events, and knowledge gained from external events, to allow the promotion of good practice and assist personnel to avoid errors and bad practice.



## 4.1.2 Governance

**Process Group Objective:** To embed an integrated governance framework covering the decision-making, performance management and control of NNB GenCo (SZC); providing the structures to give overall direction to the organisation and to satisfy expectations of accountability to those outside it and ensuring that safety and risk management is at the heart of decision-making and is considered and supported at the highest level in NNB GenCo (SZC).

**Process Group Description & Scope:** To define and document the policies, processes, procedures, controls and accountabilities for decision-making within the project, ensuring safety is pre-eminent. To ensure that risks are effectively mitigated and robust controls are established. To provide legal counsel to ensure that NNB GenCo (SZC) complies with all relevant legislation, policies and procedures.

## **Component Business Processes:**

- Identify Legal Requirements to understand the regulatory and legislative requirements and define the standards for the way in which NNB GenCo (SZC) will work;
- Define Governance Arrangements to identify, define, implement and manage the necessary decision-making processes and delegations of authority; to manage the risk framework defined for the management of risks
- Provide Legal Counsel to provide personnel responsible for giving advice and guidance on all legal matters affecting NNB GenCo (SZC), and to act in court if required;
- Maintain the Integrated Management System to maintain the NNB GenCo (SZC) integrated management system, which integrates all the organisational processes and procedures into one complete framework and defines the requirements for measurement, assessment and continual improvement of health, safety, environmental, security, quality and financial elements.
- Assess Compliance & Performance to assess compliance and performance of the management system through mechanisms including management review

## 4.1.3 Business Planning & Investment

**Process Group Objective:** To define the mission, ambitions and values of NNB GenCo (SZC) as well as the strategic objectives aligned to EDF Energy. To provide financial forecasts for the business programme and to monitor performance against the objectives and forecasts.

**Process Group Description & Scope**: To define the strategic objectives and establish the medium and long term business plans, financial budgets and forecasts based on the EDF Energy medium term plan. To monitor the performance of NNB GenCo (SZC) against its objectives, budgets and forecasts and to ensure the availability of financial resources to meet NNB GenCo (SZC) business objectives.

#### **Component Business Processes:**

 Define Mission, Ambitions & Values – to establish the mission, ambitions and values of NNB GenCo (SZC);



- Define Objectives & Performance Framework to define the objectives of NNB GenCo (SZC) and the framework for assessing the success in achieving those objectives;
- Manage Investment Case to manage the investment case and to continually update and review it as a result of business performance over time, market forces and external factors;
- Prepare Budgets & Forecasts to prepare the medium term plan, annual budgets and quarterly forecasts including budget approvals, monitoring and review of budgets and forecast data;
- Arrange Funding to liaise with NNB GenCo (SZC) shareholders and external stakeholders to ensure funding for the project is delivered at the appropriate time and in accordance with budgets;
- Monitor Financial Performance to monitor and control financial data including comparison of actual figures against budgets & forecast and monitoring the efficiency of the hedge strategy.

## 4.1.4 Assurance

**Process Group Objective:** To provide confidence that technical, health & safety, quality, nuclear, environmental and security requirements are complied with.

**Process Group Description & Scope:** To perform business, technical and regulatory assurance activities and to oversee non-conformance resolution.

#### **Component Business Processes:**

- Establish Independent Assessment Programme to establish an integrated schedule of all assurance and compliance assessments, including external audits, self-assessments and management reviews;
- Conduct Assessment to assess compliance against requirements including Nuclear Site Licence, health, safety, environment, quality and security through internal or external audits. This can be conducted through documentation reviews, inspections and surveillance;
- Manage Findings to identify and report products and processes that do not conform to specified requirements with the identified Non-Conformances segregated, recorded, reviewed, categorised and analysed
- Escalate Findings To identify and resolve shortfalls in behaviours, culture, compliance or safety by ensuring that the communication of advice is escalated to the appropriate level of management.

## 4.2 Core Processes

The core processes are the process capabilities that deliver the key objective. Some core processes support NSL, environmental permits or international standards requirements. The NNB GenCo core processes include:



## 4.2.1 **Project Management**

**Process Group Objective:** To deliver project scope in a safe manner, ensuring timely and cost effective delivery to the right level of quality.

**Process Group Description & Scope:** To plan, organise, secure and manage the resources required to successfully complete the SZC project.

#### **Component Business Processes:**

- Plan Construction to manage the planning which will inform the order and scope of construction activity throughout the execution of the project.
- Conduct Project Initiation define a project's scope, approach, plan and resources enabling the organisation to understand the work that needs to be done to accomplish the project's deliverables prior to committing resources and/or budget;
- Conduct Project Gateway Review manage the controlled execution of a project, reviewing progress and performance, taking corrective actions. Reviewing preparedness and provide authorisation to move between project phases;
- Conduct Project Closure formal closure of the project, ensuring all deliverables have been handed over, outstanding issues have an accepted business owner, commercial contracts are closed and the project closure report approved;
- Control Project providing scheduling, cost, risk and change processes and systems to facilitate the controlled execution of the project and the reporting of project performance for management review;
- Manage Contract providing commercial administration of contracts, from their initiation, through their execution, including cost and progress verification, contract change and dispute resolution, through to ultimate and timely contract closure.
- Manage Quality to manage the planning, management, audit and improvement of Quality throughout the execution of the Project.

## 4.2.2 Design

**Process Group Objective:** To produce an integrated design that meets the safety and commercial requirements and obligations of NNB GenCo (SZC) as an operator and licensee.

**Process Group Description & Scope:** To manage the interface with the design organisation and the subsequent adaptation of detailed design to meet UK and site specific requirements, ensuring compliance with regulatory controls and ensuring replication of the HPC design as far as possible.

## **Component Business Processes:**

 Capture Requirements for Design – To capture requirements from the full spectrum of contributors, validating submissions and where appropriate, accepting the requirement prior to cascading to the appropriate design entities for action. Also controls anticipated technical risks and exploit identified technical opportunities associated with the design, providing a mechanism to assess actions in the context of the holistic design and in an integrated fashion;



- Produce Design to enable the Project to achieve Intelligent Customer control over the production of the design by the relevant designer. As such, the arrangements provide oversight to the work undertaken by the Responsible Designer or Contract Partner, along with instructions and specifications to support the specific UK and Project context. Also ensures proposed changes to the design are documented, reviewed and approved prior to the work being undertaken, then subsequently incorporated into all aspects of the design and issued for execution;
- Manage Design Change to minimise design change from the base design of Hinkley Point C, and where design change is unavoidable, ensure proposed changes are documented, reviewed and approved, and to also ensure that the safety and environment cases are updated throughout the lifecycle of the plant;
- Accept Design to support the formal review and acceptance of project design deliverables, ensuring claims made in the safety case, environmental case, security arrangements and Project business case at each stage of the plant life cycle are fulfilled by the plant as finally installed and commissioned;
- Establish Design Readiness to support internal and regulator controls to ensure the design is in a suitable state to release the dependent activities, whether they relate to detailed design, procurement, manufacture or construction.

## 4.2.3 Procure

Building **better energy** together

**Process Group Objective:** To procure the goods and services that meet quality, safety and financial requirements for the construction, operation and decommissioning of the nuclear plants.

**Process Group Description & Scope:** To manage all the activities in support of the procurement of goods and services for the construction of nuclear plants.

## **Component Business Processes:**

- Develop Procurement Strategy to select the procurement route to be followed, development of the procurement strategy, establishing the pre-qualification questionnaire and agreeing the associated scoring mechanism;
- Pre-Qualify Suppliers to issue the pre-qualification questionnaire, conducting credit checks, receiving returns, analysing responses and production of an evaluation report which provides a shortlist of suppliers for inclusion in the tender process;
- Conduct Tendering to create and issue the tender, evaluation of responses and the approval of contract strategy paper upon which negotiations will be based. Associated processes of supplier assessment and credit assessment are undertaken to ensure suppliers have appropriate organisational arrangements in place to meet contractual requirements prior to contract award;
- Negotiate & Select Suppliers

   to confirm of contract scope and alignment of parties involved in the negotiations, undertaking the negotiations with supplier/contractor, through to preparing the contract recommendation pack presented for approval prior to contract signature;



• Award Contract – to present the contact for investment approval, creation of the purchase requisitions and release of purchase orders within the financial system, together with formal signature and exchange of contract.

## 4.2.4 Manufacture

**Process Group Objective:** To ensure critical components are provided by competent suppliers to meet the technical, performance and quality specification of the design.

**Process Group Description & Scope:** to provide assurance of the correct application of contractual arrangements and the conformity of components and equipment with specified requirements.

#### **Component Business Processes:**

- Assess Supplier Qualification to qualify the preferred bidder (main Contract Partner with its supply chain) before contract signature and through the contract life, based on an evaluation of technical capabilities and management system assessment;
- Conduct Manufacturing Surveillance to ensure conformity of equipment, parts and fuel assemblies against contractual requirements, in particular the review of manufacturing documentation, the management of in-shop inspection and the quality release of the equipment and parts before shipment to site;
- Issue Quality Release Certificate to support the Quality release of equipment or parts, following the completion of all the surveillance activities performed by the Licensee, the Responsible Designer and the Conformity Assessment Bodies during the design and manufacturing steps. It enables the shipment of equipment to site and the transfer of lifetime records to the Site Documentation Centre;
- Conduct On-Site Fabrication Surveillance to conduct surveillance during fabrication activities on site, such as equipment assembly, welding, non-destructive testing and segregation of materials.

## 4.2.5 Construct

**Process Group Objective:** To ensure the activities undertaken at Site are conducted in a safe manner, to the right quality and agreed timescales whilst complying with the requirements (Licence Conditions, Environmental Permits, Planning Conditions, etc.)

**Process Group Description & Scope:** To manage the construction programme and discharge the responsibilities of the 'Intelligent Customer' in relation to the construction outsourced to the Contract Partners.

#### **Component Business Processes:**

- Mobilise Contract Partner to ensure the Project is ready to receive the Contract Partner on Site, including kick-off meetings, logistical arrangements, handovers from previous construction phases and ensuring the Contract Partner has completed their preparations;
- Manage Construction to control the construction activities on site, ensuring work is planned and the associated risk assessments/method statements are agreed,



Contract Partner activities are co-ordinated, the quality and safety of the work activities are monitored and any non-conformances are addressed;

- Manage Construction Change to co-ordinate, communicate, accept and implement clarification and change related activities between the various interested parties, including the manufacturer, Contract Partner and the party responsible for the design;
- Accept Completed Work to ensure the handover of work undertaken by the Contract Partner to another Contract Partner and the formal acceptance of work and transfer of ownership to the Site Construction Team on behalf of the licensee;
- Demobilise Contract Partner to manage the orderly exit of the Contract Partner from the Site, including return of equipment and facilities and their removal of materials and construction plant;
- Manage Site Operations to manage the full spectrum of logistical and Site facilities, spanning delivery management, Site access, catering and welfare facilities, through to site communications, roads and office facilities, and the provision of shared site services, such as on-site plant hire and the fuel supplies.

## 4.2.6 Commission

**Process Group Objective:** To confirm the functional and safety performance of the reactors, their supporting systems and the conventional plant installed at the station.

**Process Group Description & Scope:** The process during which nuclear power plant structures, systems and components, having been constructed, are made operational and verified to be in accordance with the design and to have met the required performance criteria.

## **Component Business Processes:**

- Prepare for Commissioning to prepare test plans including test stages, identify test equipment and resources, and document, review and approve test procedures;
- Conduct Commissioning to execute tests as planned with regulatory inspections in line with agreed hold points and monitor/report test progress;
- Verify Commissioning to analyse test results and verify the tests have been properly completed;
- Handover to Operations to compile the test procedures and all related documentation for handover to operations.

## 4.2.7 Operate

**Process Group Objective:** To ensure the safe, reliable and efficient running of the station.

**Process Group Description & Scope:** All activities required to operate and maintain the plant, ensuring the plant operates safely, reliably, efficiently with optimised performance and scheduled maintenance.

## **Component Business Processes:**

edfenergy.com

Building **better energy** together

NNB Generation Company (SZC) Limited Registered in England and Wales. Registered No. 09284825 Registered Office: 40 Grosvenor Place



- Prepare Operational Capability to prepare for operational running taking into account experiences learned through the construction and commissioning phases;
- Operate Plant to carry out routine operations, plant monitoring, refuelling and return to service following modifications:
- Maintain Plant to keep the plant in the required condition including maintenance activities and control of plant spares procurement;
- Manage Nuclear Fuel to handle and store Nuclear Fuel from control of fuel procurement, transport, receipt at the station and the transportation of the irradiated fuel:
- Manage Power Purchase Agreement to own and manage the Power Purchase Agreement which will specify price controls agreed with EDF Group.

#### 4.2.8 Decommission

Process Group Objective: To plan for the decommissioning of a nuclear plant at the end of a plant's productive lifecycle in accordance with statutory requirements.

Process Group Description & Scope: To manage the preparation of a corporate decommissioning strategy to comply with statutory, regulatory and licensing requirements and ensure that NNB GenCo (SZC) is able to meet the full cost of decommissioning its nuclear plants and meet its share of waste management costs.

#### **Component Business Processes:**

Prepare Decommissioning Plans – to include a group level strategy covering all • plants, with proposals for waste disposal, decommissioning, estimates of costs and specification of the financial securities that apply.

#### 4.2.9 **Consents, Permits & Licences**

Process Group Objective: To satisfy external planning requirements for obtaining development consent orders, and to obtain a nuclear site licence and environmental permits, and to meet statutory requirements during the life of the build.

Process Group Description & Scope: To manage the lifecycle of the application from identification of the required consents, permits and licences through to managing changes for consents, permits and licences that have been granted.

#### **Component Business Processes:**

- Maintain Consents, Permits & Licences to obtain the necessary consents, • permits and licences including development consent orders, environmental permits and a nuclear site licence;
- Change Consents, Permits & Licences to ensure that there are appropriate • management arrangements in place to identify when changes are required to any of the consents, licences and permits held by NNB GenCo (SZC), and the process by which to apply for any changes identified.



- Relinquish Consents, Permits & Licences to ensure that there are appropriate management arrangements in place to relinquish any of the consents, licences and permits held by NNB GenCo (SZC);
- Communicate with Regulators to ensure communication with regulators is professional, controlled, consistent and appropriately documented. This will help ensure a healthy, open and transparent relationship with the regulators.

## 4.3 Support Processes

The support processes are the process capabilities that enable the core and management processes to function. Some support processes incorporate NSL, environmental permits or international standards requirements. The NNB GenCo (SZC) support processes include:

## 4.3.1 Documents & Records

**Process Group Objective:** To deliver and maintain a coherent and co-ordinated approach to Document and Records Management throughout NNB GenCo, to ensure consistency of approach, effectiveness in operations, compliance with regulations, and to meet commercial objectives, whilst protecting information and access to it.

**Process Group Description & Scope:** To manage documents and records produced and received by NNB GenCo (SZC), meeting regulatory requirements for the collaboration of information and the management of nuclear lifetime records.

#### **Component Business Processes:**

- Establish Documents & Records to manage the production of new documents and records (including the generation of revised versions incorporating changes and the storage of physical records) so that appropriate control is maintained over quality, versions and authorisation;
- Maintain & Access Documents & Records
   – to ensure that documents and records
   are kept up to date and access, particularly to physical records, is properly
   controlled;
- Dispose of Documents & Records to ensure that documents and records which are no longer required are appropriately disposed of;

## 4.3.2 People

**Process Group Objective**: To recruit, develop and retain competent and motivated people, ensuring that the organisation has the right number of competent people during each stage of the project lifecycle, and that changes in the organisation are managed appropriately.

**Process Group Description & Scope**: To advise and support line management on all aspects of people management as well as potential and actual employees and contractors and to ensure that changes in the organisation are managed appropriately and in accordance with statutory, regulatory and licensing requirements.

#### **Component Business Processes:**

• Plan and Change Organisational Structure and Resources – to prepare resource requirements, succession planning, workforce risk assessment and the design of

NNB Generation Company (SZC) Limited Registered in England and Wales. Registered No. 09284825 Registered Office: 40 Grosvenor Place



the organisation in addition to control organisational changes and manage the potential impacts organisational changes will have on nuclear and radiological safety, environmental protection relating to radioactive substances and the security aspects where they impact on nuclear safety either immediately or due to latent effects which could have an impact in the future;

- Recruit, Transfer & Extend Staff to select, assess and recruit candidates including liaising with third party recruitment consultancies, advertising vacancies and managing employment contracts;
- Develop & Manage Workforce Performance to provide guidance and coaching to line managers to enable them to achieve optimum performance from their people, including guidance on periodic performance reviews as well as support in managing under performance and bespoke team and individual orientated interventions. Maintain oversight of talent within the organisation and ensure processes are in place and utilised to enable effective succession management and individual career development;
- Support People to provide support to the workforce in managing the requirements of work and personal life and promote and support optimum physical and mental well-being, and provide support to the operation of the Human Resources function;
- Manage Leavers To handle employees leaving the business;

## 4.3.3 Training & Qualification

**Process Group Objective:** To ensure that individuals receive the appropriate training to develop the competencies needed to perform their assigned roles.

**Process Group Description & Scope:** Applies to all NNB GenCo staff and contracted and non-plant personnel through the pre-construction, construction and operating phases. Training, experience and educational requirements associated with each designated role are established, as well as the process for assessing individuals against these requirements. Appropriate training is identified, produced and delivered using a systematic approach.

## **Component Business Processes:**

Building **better energy** together

- Manage Roles & Competencies to identify the competency requirements for specified roles and compare the requirements with the individuals nominated for these roles, identifying any shortfalls and making plans to address those;
- Develop Training to provide the process for enrolling in training at NNB GenCo (SZC);
- Deliver Training to apply the Systematic Approach to Training (SAT) in order to provide training that enables personnel to perform their jobs effectively and efficiently.



## 4.3.4 Communications

**Process Group Objective:** To ensure the NNB GenCo (SZC) strategy, objectives and message is positively received by all stakeholders and to recognise the relationship with EDF Energy for external communication.

Process Group Description & Scope: To manage external communications including:

- Handle Public Affairs to manage all aspects of public affairs including strategy, planning, lobbying, stakeholder engagement and communication;
- Manage Media Relations to manage all aspects of media relations including strategy, planning, media enquiries and releases as well as providing support for events and exhibitions;
- Manage Governmental Relations to become acquainted with government officials with the intention of helping them conduct their business of formulating and executing public policy;
- Provide Shareholder Communications to communicate NNB GenCo (SZC) performance forecasts and results including annual and long term objectives;
- Deliver Nuclear Education & Showcasing to provide greater internal and external understanding of the nuclear energy business by building public and customer awareness;
- Manage External Stakeholders to establish a relationship with external stakeholders including members of the public and regulators to understand their requirements and expectations.

## 4.3.5 Finance

Building **better energy** together

**Process Group Objective:** To provide financial accounting services and manage the interface with EDF Energy Shared Service teams.

**Process Group Description & Scope:** To provide financial accounting support, to manage the payroll and to prepare periodic reporting to EDF Energy.

## **Component Business Processes:**

- Process Financial Transactions to include GL journals, inter-company entries, payables, receivables, fixed assets, cash, bank reconciliation, and month-end processes;
- Prepare Financial Reports & Accounts the preparation of financial accounts and the creation and generation of reports to meet statutory, tax and management reporting requirements;
- Support & Maintain Financial Systems manage the organisation structure, cost/profit centres and hierarchies and manage interfaces to other systems/departments.
- Manage Financial Risk to manage all forms of financial risk including credit and foreign exchange.



## 4.3.6 Information Management

**Process Group Objective:** To provide Information Systems (IS) which are capable of providing and managing the information required to effectively manage the organisation.

**Process Group Description & Scope:** The planning, acquisition, implementation, monitoring, evaluation, delivery and support of the IS services used to manage NNB GenCo information.

## **Component Business Processes:**

- Plan & Organise IT Services to plan the use of IT and how best it can be used to help achieve the company's goals and objectives. It also highlights the organisational and infrastructural form IT is to take in order to achieve the optimal results and to generate the most benefits from the use of it;
- Acquire & Implement IT Services to identify IT requirements, acquire the technology, and implement it to support the company's business processes. This also addresses the development of a maintenance plan that a company should adopt in order to prolong the life of an IT system and its components;
- Deliver & Support IT Services to focus on the delivery aspects of the IT. It covers areas such as the execution of the applications within the IT system and its results as well as the support processes that enable the effective and efficient execution of these IT systems;
- Monitor & Evaluate IT Services Ensure IT services meet NNB GenCo business requirements, are compliant with regulatory requirements and deliver to agreed Service Level Agreements (SLA's) for all IT service delivery elements;
- Provide Management Information to collect, analyse and provide information on the performance of the organisation.

## 4.3.7 **Properties & Facilities**

**Process Group Objective**: To provide property and facilities services that satisfies the needs of all stakeholders.

**Process Group Description & Scope:** The provision of property and facilities management services at designated NNB GenCo sites.

#### **Component Business Processes:**

- Acquire Property Sites to acquire and set-up properties including the negotiation of site lease and other contracts / costs;
- Maintain Property Sites to maintain NNB GenCo designated properties including the execution of property related health, safety, security and sustainability requirements;
- Dispose of Designated Property Sites to dispose of properties including the negotiation of site lease termination and other contract costs, removal of site furniture and IT infrastructure.



## Appendix A

## A1. Definitions

## A1.1. Policy

A suite of policies exists to ensure all employees operate in a way that meets or exceeds the requirements of our shareholders, key stakeholders, employees and legal requirements. The policies either come from EDF SA, EDF Energy or have been developed to meet specific NNB GenCo (SZC) needs. The NNB GenCo (SZC) Ltd Board has overall authority for policy approval and appointment of the Policy Owner who has accountability for its health and adoption within NNB GenCo (SZC). Policies, by their nature, are mandatory and must be complied with by all employees.

## A1.2. Policy Practice & Guidelines

One or more Practice & Guidelines may accompany each Policy. They are a combination of define (what) and describe (why and how) categories. The description component elaborates the high level policy statements by specifying detailed practices employees must do or must avoid doing. The describe component is supporting guidance to help assist in the interpretation of the policy and practices. Compliance with the practice, like the policy itself, is mandatory.

## A1.3. Executive Committee Terms of Reference

Definition document detailing the purpose, scope, authority and membership of executive committees. Terms of reference are approved by the Board and are mandatory in terms of the discharging the defined duties and operating within the defined scope only.

## A1.4. Process Group and Process

Process groups comprise of a number of processes, which in turn comprise of a number of company procedures. They define, at a high level, the objective and scope of the key activities undertaken by the business, and the interactions with other process groups and external organisations. They are approved by the Board, who also appoint the Process Owners who has accountability for its health and adoption within NNB GenCo (SZC). Employees must operate within the defined scope of process groups and processes.

#### A1.5. Procedures

These mandatory definition documents are linked to form interactive chains which make up individual processes. The purpose and scope are clearly defined to ensure their objectives and the boundaries in which they apply are clearly understood. They are broken down into a number of activities, with associated purpose, sub steps and responsibilities also clearly defined. Procedures are managed by Process Leads, appointed by the Process Owner, and have accountability for the Procedures health and adoption.

Building **better energy** together

edfenergy.com



## A1.6. Work Instruction

These definition documents are also mandatory. They generally cover a single activity, but can cover more than one activity, but cannot cover the responsibilities of more than one team. They help to describe in detail how the activity is to be completed and aim to ensure a consistent outcome, which is achieved either through the content of the work instruction or through reference to an associated standard. A work instruction may also contain elements of description, in the form of guidance, to enable the associated tasks and decisions to be undertaken without error. They are approved by the individual with management responsibility for the activity supported by the work instruction.

## A1.7. Business Forums Terms of Reference

Definition document detailing the purpose, scope, authority and membership of business forums and groups. Terms of reference are approved by the parent executive committee or in accordance with associated procedure through which they are established. Forums and groups are mandatory in terms of discharging the defined activities and operating within the defined scope only.

#### A1.8. Specification

A definition document detailing an explicit set of requirements to be satisfied. The specification will be agreed by the associated parties, generally customer and supplier, involved in the relationship. It is mandatory and aims to ensure the exchange between the parties, whether a physical product, service or information exchange, meets expectations.

#### A1.9. Standard

Similar to a specification, but this definition document is generally generated by one party for use by multiple parties. The standard is mandatory, with the aim of ensuring the output or activity of one party consistently meets the requirement of the other.

## A2. Description of Elements

#### A2.1. Organisational Note

An organisational note describes a directorate, department or team in terms of purpose, scope, structure, activities and measures. The organisational note looks to paint a rich picture to enable the reader to build up a clear understanding of what the organisational unit is about. An organisational note will generally be consumed by members of the organisational unit, particularly new starters as part of their induction, or by 3rd parties when a new business relationship is being established, to understand what their new business partner is about. An organisation note will be approved by the responsible manager and is for information only.

#### A2.2. Manual

A manual is a how to guide established by an organisational unit to enable associated staff to put the tasks they are expected to undertake into context, understand when they are to



undertake them and how they are to undertake them. It will place a number of definition documents, such as company procedures, specifications and standards into context, and explain how they are to be used or undertaken. The explanation may be through the document itself or through work instructions. The manual must not define new processes or company procedures, which must be detailed in framework (overview), or define (what) components of the IMS.

#### A2.3. Briefing

A description document aimed at increasing awareness and understanding of the reader. Not instructive in any way, a brief will explain what needs to be done and point to where additional information, guidance and instruction can be found.

#### A2.4. Guide

A guide aims to explain to non-experts and 3rd parties what they need to do and how they need to do it in relation to one or more definition documents. A guide prevents the individual having to delve into the detail of a definition document to undertake the task. Not mandatory in their own right, they may well support mandatory activities defined elsewhere.

## A3. Ownership

#### A3.1. Process Owner

The process owner is the person who is accountable for all aspects of a business process. For developing it, implementing it and making sure that it works well.

The process owner is accountable for how well a process performs and maintains quality and control of the process.

Process owners are assigned by the NNB GenCo (SZC) Board at the process group level of the process hierarchy and are accountable for all the processes and procedures that sit within the process group. Key accountabilities of process owner are to:

- Understand and articulate the scope and purpose of the process group and to communicate this to the business and other stakeholders;
- Ensure the process group is aligned with the NNB GenCo (SZC) mission, ambition, values and strategic objectives;
- Ensure appropriate resource is in place to develop, implement, monitor and manage the underlying processes in line with the process governance framework;
- Ensure the processes meet the evolving business requirements and actively promote process improvement; and
- Assess the performance of the process group by carrying out process selfassessments.

## A3.2. Process Lead

A process lead is the person who will manage the development, implementation and day to day operation of a particular business process. The process lead is assigned by the

Building **better energy** together



process owner, and will generally be one of their direct reports. Key accountabilities of process lead are:

- Nominating an author and reviewer and deciding which stakeholders should be consulted when developing company procedures;
- Agreeing the process implementation plans, tracking progress and conducting a post implementation review;
- Ensuring the company procedure is complied with and non-conformance and learning reports addressed;
- Keeping the process owner informed of process performance including escalating any process issues; and
- Assess the performance of the process through a process of self-assessment.

## A3.3. Policy Owner

A Policy Owner is the person who is accountable for the development and implementation of the policy through business activity. Key responsibilities of the policy owner are:

- Appointing the policy lead.
- Providing guidance to the policy lead on policy requirements
- The development of the policy in line with the framework
- Assessing the impact of the policy on the business
- The development of the communication plan and confirming it has been completed.

## A3.4. Policy Lead

A policy lead is the person who will manage the day to day implementation of the policy to ensure the policy is met through business activity. Policy leads are appointed by policy owners. Key responsibilities of the policy lead are:

- Review EDF Energy policy proposals.
- Assess the impact of EDF Energy Policies on NNB GenCo (SZC)
- Develop NNB GenCo policies and consult with the NNB GenCo (SZC) Policy Owner through the policy lifecycle
- Assess the impact of NNB GenCo (SZC) policies on the NNB GenCo (SZC) business.
- Agree actions and tracking for implementation
- Communicate the policy to the business

## A3.5. Legislation Category Owner

The responsibilities of legislation category owners are complimentary to the responsibilities of process owners with regards to ensuring processes meet evolving business requirements. A legislation category owner is responsible for ensuring the legislation items



within an assigned category (e.g. environmental, property & facilities, etc) are met through the business activity.

A legislation category owner may appoint legislation category leads to support the delivery of their responsibilities on a day-to-day basis.

## A3.6. Legislation Category Lead

A legislation category lead is the person who will ensure the business activity meets specific legislation and regulatory requirements on a day to day basis through process development, implementation, and assessment. Legislation category leads are appointed by the legislation category owner. Key responsibilities are to:

- Review new or amended legislation and regulatory requirements to identify whether they apply to NNB GenCo (SZC) and update the relevant Applicability Register.
- Identify the implications and establish the arrangements, actions and training needs required to achieve compliance with the legislation or regulatory requirements.
- Implement identified actions to ensure NNB GenCo (SZC) has arrangements in place to achieve and maintain compliance with applicable legislation and regulatory requirements.
- Systematically review existing legislation, regulatory requirements and Applicability Registers, evaluate any ongoing impacts.