

Sizewell C Project

Radioactive Substances Regulation (RSR) Permit Application

Appendix E

Support Document E3 – SZC RSR Compliance Matrix

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1 INTRODUCTION

1.1 Purpose

1. NNB Generation Company (SZC) Ltd (SZC Co.), part of EDF Energy, applied in March 2020 for a Radioactive Substances Regulation (RSR) permit for Sizewell C (SZC) under the Environmental Permitting (England and Wales) Regulations 2016 (as amended).
2. This document describes through its written managements arrangements how SZC Co. intends to demonstrate compliance with the conditions of an RSR permit for SZC which may be granted.

1.2 Scope

3. In support of SZC Co.'s Application for an RSR permit for SZC, management arrangements have been developed, are being developed and will continue to be developed and implemented, demonstrate compliance with the SZC RSR permit conditions.
4. This document sets out references to the relevant management arrangements within the Integrated Management System (IMS). Where arrangements have not been prepared as they are not required at the current stage of development of the project, work SZC Co. will undertake to comply with the appropriate permit conditions as indicated.
5. This document will be periodically reviewed and revised at least once before each lifecycle phase (Construction, Non-Active Commissioning, Radioactive Commissioning, Operation and Decommissioning) to reflect compliance and changes to the IMS.
6. The Compliance Matrix provides information regarding compliance with each permit condition, including:
 - Permit conditions requirements (grouped by theme);
 - Procedures and/or other documents; and
 - Commentary, where appropriate, describing the approach taken to compliance now and in the future.

1.3 Definitions

Term / Abbreviation	Definition
FWP	Forward Work Plan
HPC	Hinkley Point C
IC	Intelligent Customer
IMS	Information Management System
IPSA	Inter Project Service Agreement
NNB GenCo (HPC)	NNB Generation Company Limited Hinkley Point C
RSR	Radioactive Substances Regulations
RWA	Radioactive Waste Adviser
SZC	Sizewell C
SZC Co.	NNB Generation Company (SZC) Ltd

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1.4 References

Ref	Title	Document No.	Version No.	Location	Author
1.	Environment Policy	EDFE-POL-ENV-1	6.0	EDMRS	SZC Co.
2.	SZC Company Manual	100200192	2.0	EDMRS	SZC Co.
3.	SZC Management System Manual	100200202	1.0	EDRMS	SZC Co.
4.	SZC Hold Point List	100200686	1.0	EDRMS	SZC Co.
5.	Develop or Amend Company Procedure	NNB-102-PRO-000077	7.0	IMS	NNB GenCo (HPC)
6.	HPC and ND Resource Strategy	100196816	4.0	EDRMS	NNB GenCo (HPC)
7.	SZC Co. Intelligent Customer Policy	100200193	1.0	EDRMS	SZC Co.
8.	Manage Interface with Regulators	NNB-209-PRO-000026	5.0	IMS	SZC Co.
9.	Assess Individual Competency	NNB-102-PRO-000111	2.0	IMS	NNB GenCo (HPC)
10.	Enable Organisational Learning	NNB-104-PRO-000011	6.0	IMS	NNB GenCo (HPC)
11.	Investigate Incidents	NNB-308-PRO-000040	2.0	IMS	NNB GenCo (HPC)
12.	Manage Documents	NNB-301-PRO-000015	5.0	IMS	NNB GenCo (HPC)
13.	Perform Self-Assessment	NNB-102-PRO-000062	5.0	IMS	NNB GenCo (HPC)
14.	Perform Independent Assessment	NNB-202-PRO-000010	4.0	IMS	NNB GenCo (HPC)
15.	Define, Manage and Release Key Hold Points	NNB-209-PRO-000025	6.0	IMS	NNB GenCo (HPC)

2 COMPLIANCE APPROACH

- SZC Co.'s approach towards achieving compliance against the RSR environmental permit conditions is to develop, implement and maintain management arrangements that describe the execution of tasks related to activities on the SZC Project. Arrangements consist of elements populating the IMS, such as processes, standards, procedures, work instructions, guidance, forms and templates, and schedules. The compliance matrix maps where and how compliance is achieved within the IMS. For a given permit condition, compliance may be achieved through one or more part or parts of any IMS element(s).
- For future arrangements, particularly those that are associated with the operation of the plant, there will be a period of 'trial working': a period of time when the arrangements may be used but not required facilitating familiarisation, identification and improvements affecting compliance. Within the compliance matrix arrangements that are to be developed will be governed by the approach to trial working e.g. Operating Rules are currently being developed although they are not needed until the active commissioning phase. Written arrangements (processes and procedures) will be developed in accordance with Develop or Amend Company Procedure.

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3 COMPLIANCE MATRIX

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	Requirement	Development Phase		Construction Phase	Position by active commissioning and operations
		At point of application	Prior to Financial Investment Decision (FID)		
MANAGEMENT/ ORGANISATIONAL STRUCTURE	Management Arrangements at Nuclear Sites, Section 3 and 4 - Organisation Structure (3) and Environmental leadership, direction and control (4)	<p>SZC Co. has adopted the EDF Energy Environment Policy (Ref. 1) in keeping with NNG GenCo (HPC).</p> <p>The Company Manual owned by the Managing Director (Ref 2) describes the company framework and governance, including committee structures. The document will be used through all stages of the project lifecycle and updated as necessary.</p> <p>The Management System Manual (Ref. 3) owned by the SZC Managing Director explains how the management processes for SZC Co. are to be implemented. It describes the IMS which is the tool used to ensure SZC Co. is able to act as an intelligent customer to design, procure, construct, commission, operate and eventually decommission SZC</p> <p>Key hold points have been established (Ref. 4) to ensure the project is ready to progress where there may be a step change in risk. The SZC Safety Director will be responsible for reviewing and adopting the Define, Manage and Release Key Hold Point procedure from Hinkley Point C (HPC) during the development phase.</p> <p>The Develop or Amend Company Procedure (Ref. 5) is a dual badged HPC/SZC procedure where supporting guidance has been updated to reflect the requirements to support review and adoption of arrangements developed for the HPC project into SZC.</p>	<p>Various arrangements to be adopted, reviewed and, where needed, amended for SZC including:</p> <p>- Define, Manage and Release Key Hold Points Procedure (Ref. 15)</p>	<p>The SZC company framework, governance and committee structure will continue to evolve as the project progresses, including interfaces with the HPC project. Arrangements will continue to develop (learning lessons from HPC and other sources) to ensure that the organisation remains suitable to hold an RSR permit through subsequent phases.</p> <p>Readiness of the arrangements will be checked prior to any significant increase in project risk through the management of hold-points process. Following permit grant where changes are deemed to have a significant impact on RSR permit compliance the Environment Agency will be notified in accord with the relevant permit condition.</p>	<p>The SZC project will need to have a well-defined organisational structure for operations and a route map to get there.</p> <p>The organisational structure will continue to evolve to meet the changing demands of the project and this will be managed through existing processes (e.g. Management of change).</p> <p>There will be a ramp up in development of the organisation prior to operation of the power station which will need to take appropriate consideration of commissioning activities.</p> <p>Commitment 2 outlines the SZC project's future development in this area.</p>
ORGANISATIONAL RESOURCES Managing and operating the activities using sufficient competent persons and resources. Notification to the Environment Agency of proposals for significant changes to the management system or resources.	RSR Condition 1.1.1 & 4.3.5 / RSR Management Arrangements at Nuclear Sites, Section 5 and 6 (SYSTEM IMPLEMENTATION AND ENVIRONMENTAL CAPABILITY) RSR REPS MPLDP2	<p>SZC Co. has an agreed joint resourcing strategy with the HPC project (Ref. 6). It has established an organisational structure capable of ensuring compliance with the RSR permit. It is also developing a nuclear baseline strategy.</p> <p>The organisational capability requirements for foreseeable RSR permit compliance activities have been outlined in the SZC project environmental baseline. It describes the current capability and capacity to deliver activities, including those relating to RSR compliance and demonstrates that the organisation understands what resources are required to deliver its planned activities as the nature and extent of the activities change.</p> <p>An Intelligent Customer (IC) policy has been developed by the SZC organisation (Ref. 7). From an environmental (and RSR) compliance perspective, the SZC Environment Manager holds the responsibility for acting as the Environment IC within the SZC project.</p> <p>Support to the SZC project is also provided under an Inter Project Service Agreement (IPSA) with the HPC project.</p>	<p>The Nuclear Baseline Statement will be developed to support the Nuclear Site Licence Application and will include the roles within the environmental baseline necessary for RSR compliance. Key to the successful ongoing maintenance and management of the nuclear baseline are robust management of change arrangements. Accordingly, SZC will, during the development phase put in place management of organisational change arrangements to ensure that any implementation of a change to its nuclear baseline organisation is assessed and managed. The SZC Head of Human Resources will be responsible for implementing the SZC project's management of organisational change arrangements and ongoing maintenance of the nuclear baseline. Where changes are deemed to have a significant impact on RSR permit compliance the Environment Agency will be notified in line with condition 4.3.5 of the environmental permit. SZC Co. will notify the Environment Agency of any significant organisational changes through the established regulatory interface arrangements (Ref. 8).</p> <p>Supporting arrangements for how SZC Co. performs its IC role will be reviewed and adopted from the HPC project.</p> <p>The HPC project will continue to support the SZC project through the IPSA agreement.</p>	<p>By the construction phase the nuclear baseline will have been further developed and implemented, although no significant developments are expected to ensure compliance with the RSR permit due to the nature of the work being undertaken in this phase (e.g. primary focus on design control and procurement support).</p> <p>Readiness of the arrangements will be checked prior to any significant increase in project risk through the management of hold-points process.</p>	<p>The organisational resources will continue to evolve to meet the changing demands of the project, managed through the SZC management of change process. There will be a ramp up in development of the nuclear baseline as the project approaches the active commissioning and operational phases to ensure the organisation is sufficiently resourced and competent to operate the power station in compliance with the RSR permit.</p> <p>Commitment 2 outlines the SZC project's future development in this area.</p>

	Requirement	Development Phase		Construction Phase	Position by active commissioning and operations
		At point of application	Prior to Financial Investment Decision (FID)		
MANAGEMENT OF COMPETENCE AND TRAINING Use of competent persons in the management and operation of the facilities. Training of persons by assessing training needs and delivering training.	RSR Condition 1.1.1 / RSR Management Arrangements at Nuclear Sites, Section (SYSTEM IMPLEMENTATION, ENVIRONMENTAL CAPABILITY AND LEARNING PRGANISATION) RSR REPS MPLDP2 and MLDP5	In order to assure itself that its activities are being carried out adequately, SZC Co. requires arrangements in place to define competency requirements of the Nuclear Baseline Role holders, and assess and record the competency of the SZC Co. Organisation. SZC Co. intends to adopt the current arrangements from NNB GenCo (HPC) on competency and training. The SZC Safety Director has the responsibility for reviewing and adopting these arrangements from the HPC project during the development phase. The Assess Individual Competency Procedure (Ref. 9) is dual badged HPC/SZC arrangement. The roles identified that directly support RSR compliance have been mapped against the current allocation of training role profiles from the HPC project and are captured in the environmental baseline.	SZC Co. will need to adopt role profiles from HPC as described in the Environmental Baseline and key posts within the SZC organisation will complete demonstration of competency requirements. Supporting guidance for assessing individual competency will be reviewed and, if needed, updated to meet SZC project requirements. The prioritisation of training and competency assessment is driven by the need to ensure that the required levels of organisational competency are in place in time to undertake planned activities.	By the construction phase arrangements for demonstration of nuclear baseline competency will have been further developed and implemented. This will ensure the organisation is competent to carry out the RSR related activities taking place during the construction phase (i.e. design control). Readiness of the arrangements will be checked prior to any significant increase in project risk through the management of hold-points process.	The arrangements for the management of competency and training are not anticipated to change significantly of the lifetime of the project. The draw on RSR competency will peak during operations however the arrangements for demonstrating competency are expected to be broadly similar to those used during earlier phases. Training and competence assessments for staff involved in radioactive waste management activities will be completed prior to active commissioning.
QUALIFIED EXPERTS Consultation with suitable Qualified Experts (Radioactive Waste Advisers (RWA))	RSR Condition 1.1.4	SZC Co. is not required to have appointed Radioactive Waste Advisers prior to permit grant. Through the IPSA SZC Co. has access to experienced RWAs who form the HPC Corporate RWA Body to provide advice on the application and the development of arrangements.	SZC GenCo will develop/adopt appropriate governance processes and arrangements to ensure suitable and sufficient RWA resource is available to support the SZC project to provide timely advice when it is needed to enable compliance with the conditions of the permit. The SZC Safety Director is responsible for reviewing and adopting the arrangements for the definition and maintenance of the corporate radioactive waste advisor body from the HPC project.	By the construction phase it will be demonstrated that the SZC project has an appropriate level of RWA advice available for consultation during the project development phase. Readiness of the arrangements will be checked prior to any significant increase in project risk through the management of hold-points process.	An appropriate level of corporate RWA advice will be available for consulting on compliance with the conidtions of the RSR permit. The current arrangements allow for the ongoing review of the suitability and effectiveness of the corporate RWA body and this will continue as the project progresses to ensure that the body remains fit for purpose. In line with OPEX from other operational nuclear power stations, NNB does not anticipate an increase in the number of RWAs that make up the CRWA body to support subsequent project phases, including Operations but this will be kept under review.
LEARNING ORGANISATION, REPORTING AND NOTIFICATIONS A learning and questioning attitude should be encouraged at all levels of the organisation. The Environment Agency shall be notified without delay following the detection of occurrences which has caused, is causing or may cause significant pollution or may generate significant amounts of radioactive waste; a breach of limits or permitted waste disposal; any adverse environmental effects.	RSR Conditions 4.2.1, 4.3.1, 4.3.2; RSR Management Arrangements Guidance; Section 8 (LEARNING ORGANISATION) / RSR REPS MLDP5, MLDP1	An organisational learning process has been developed for both HPC and SZC projects. The Enable Organisational Learning Procedure (Ref. 10) is dual badged HPC/SZC arrangement and is considered fit for purpose for SZC Project. It is currently being used to record learning opportunities for HPC and SZC. Arrangements for managing the interface with regulators has been developed for both HPC and SZC projects, this will be used if any notifications are necessary.	The SZC Safety Director is responsible for review and adoption of the HPC organisational learning arrangements supporting tools during the development phase. The supporting guidance to the procedures will be reviewed and, if needed, updated to reflect SZC requirements explicitly. SZC Co. will notify the Environment Agency of any significant events through the established regulatory interface arrangements. It is anticipated these arrangements will be used through all stages of the project lifecycle and will be updated as necessary as the project develops. These arrangements the process for recording and reporting environmental events.	These organisation learning arrangements are not anticipated to change significantly over the lifetime of the project some evolution of organisational learning tools may occur prior to this phase.	It is anticipated that there will be no significant development to the current arrangements for organisational learning over the project phases leading to operation of the plant. During operations, SZC Co. will report information to Environment Agency, such as sampling and monitoring data. SZC Co. will formally notify Environment Agency of any significant events. These include, but are not limited to: <ul style="list-style-type: none">• Malfunctions and accidents leading, or potentially leading to significant pollution accidents;• Breaching a limit or QNL specified in the permit; and,• Significant adverse environmental effects that could reasonably be seen to result from the operation of the facility. Reporting will continue until permit surrender. Commitment 1 learning organisation outlines the SZC project's intent going
EMERGENCY ARRANGEMENTS (NOTIFICATIONS) The organisation shall have appropriate emergency response arrangements.	RSR Condition 4.3.1 Ionising Radiations Regulations 1999 CDM 2007 Nuclear Site Licence Condition 11	The Investigate Incidents Procedure (Ref. 11) is dual badged HPC/SZC arrangement. Arrangements for the notification of events are described above in the LEARNING ORGANISATION, REPORTING AND NOTIFICATIONS line above).	During the phases prior to fuel coming to site, the SZC project emphasis is on developing emergency arrangements to deal with conventional hazards related to a large construction site and programme which are not regulated under RSR. Nonetheless the project will have arrangements in place for investigating incidents and reporting them to the regulator where appropriate. The SZC Safety Director will be responsible for reviewing and adopting these arrangements, as appropriate, during the development phase.	During the construction phase the SZC Project will have a strategy for developing the emergency arrangements ahead of fuel being delivered to site. Readiness of the arrangements will be checked prior to any significant increase in project risk through the management of hold-points process.	The requirements for emergency arrangements on a nuclear licensed site are regulated by Office for Nuclear Regulation under Licence Condition 11. Appropriate emergency response arrangements, that address notifications required for RSR compliance during operation of the power station, will be developed in readiness for operations.
PROCUREMENT OF GOODS AND SERVICES When making decisions about the management of radioactive substances, the best available techniques should be used to ensure that the resulting environmental risk and impact are minimised. This includes consideration at the procurement stage, when materials are being specified and purchased.	RSR Conditions 2.3.1, 2.3.2; RSR REPS RSMDP7 RSR Management Arrangements Guidance; Section 7 (Change Control and Living Management Arrangements)	The SZC project intends to replicate as much of the supply chain as reasonably practicable to secure the learning opportunities provided from the HPC project. The current HPC project arrangements are being used to support the procurement of services for the SZC project.	NNB GenCo (HPC) has a full suite of procurement arrangements in place including the specification and assessment of environmental performance of good and services. The requirement to demonstrate the use of Best Available Technique (BAT) is specified by the procurement procedures and contract documentation. The majority of SZC Co. goods and services procured will be a replication of the HPC project delivered to the same specifications by the same suppliers with any BAT substantiation already made and accepted by the HPC Project and adopted by default by the SZC project. Where SZC Co. is specifying and assessing site specific goods and services which are not a direct replica of those on the HPC project the NNB GenCo (HPC) suite of procurement documentation will be used as the basis for ensuring BAT requirements are sufficiently integrated into any new specifications. The SZC Supply Chain Director will be responsible for reviewing and adopting procurement arrangements from the HPC project as appropriate. SZC Co. will continue to apply its intelligent customer arrangements.	For the majority of the goods and services that will be replicated from the HPC Project, SZC Co. will have adopted NNB GenCo (HPC)'s procurement arrangements allowing them to ensure the contractor demonstrates the design is delivered as replication of HPC and any deviations are controlled and substantiated. SZC Co. will also have adopted the HPC project's procurement arrangements required to procure any goods and services specific to the SZC site.	It is anticipated that the arrangements for procurement will remain throughout subsequent project phases and into the operation of the plant. The scale of procurement activities will decrease as the project approaches the operational phase.
DOCUMENT AND RECORD KEEPING Organisations should have the capability to secure and maintain proper protection of people and the environment, including having effective processes for managing (including identifying, updating, validating, approving, preserving and making available) records and documents that are relevant to environment protection. Records required by the permit shall be legible, be amended in such a way that the original and subsequent amendments remain legible or are capable of retrieval, be retained until notified in writing by the Environment Agency and be kept on site unless agreed otherwise in writing.	RSR Condition 1.1.2, 4.1; RSR REP MLDP3, RSMDP14	The Manage Documents Procedure (Ref. 12) is dual badged HPC/SZC arrangement. The Electronic Document and Records Management System (EDRMS) is in place for managing records created in and for the SZC project. SZC Co. is able to record and retain records necessary for demonstrating compliance with the conditions of the permit.	SZC Co. will review and adopt NNB GenCo (HPC)'s supporting guidance for retention of records relating to RSR permit compliance and for the designation of records, as new records are created. The SZC Safety Director will be responsible for review and adoption of these arrangements from the HPC project as appropriate during the development phase.	There is not anticipated to be much of a changed to the document and record keeping arrangements required for the construction phase. Nevertheless readiness will be assessed and any enhancements required for RSR compliance implemented. Readiness of the arrangements will be checked prior to any significant increase in project risk through the management of hold-points process.	Arrangements are in place for the designation and retention of records relating to the RSR permit throughout project phases and into operation. There is no step change in activity anticipated in this area.

	Requirement	Development Phase		Construction Phase	Position by active commissioning and operations
		At point of application	Prior to Financial Investment Decision (FID)		
MAINTENANCE, EXAMINATION, INSPECTION AND TESTING When making decisions about the management of radioactive substances, the best available techniques (including how a technique is maintained) should be used to ensure that the resulting environmental risk and impact are minimised. Structures, systems and components (SSC) that are, or comprise part of, environment protection measures should receive regular and systematic examination, inspection, maintenance and testing.	RSR Condition 2.3.4, 2.3.5, 2.3.6, 3.2.2, 3.2.3, 3.2.5, 3.2.6; RSR REP RSM DP3, RSM DP7, EN DP11 2 Activities and nature of the work	These arrangements will not be needed for some time as outlined in the RSR Forward Work Plan. It is intended that HPC Project's arrangements will be adopted and reviewed at a point closer to implementation.	No further development of arrangements to support RSR compliance is expected in this phase.	Care and maintenance arrangements to support equipment delivered and installed to site prior to use will be reviewed and adopted from HPC during this phase (in line with RSR Commitment 8 described in FWP) taking advantage of the lessons learned from HPC experience. The SZC project will not have full Examination, Inspection, Maintenance and Testing (EIMT) arrangements in place for the construction phase however will adopt the HPC projects arrangements prior to active commissioning to ensure operational maintenance requirements are captured in the maintenance schedule. SZC Co. will adopt the HPC project Environmental Protection Function Register discussed in section the RSR head document and arrangements for it's ongoing maintenance during the development phase. The SZC Environment Manager will be responsible for this review and adoption. In the interim the SZC project will adopt the HPC projects arrangements for ensuring the care and maintenance of equipment that is delivered and installed. Readiness of the arrangements will be checked prior to any significant increase in RSR compliance risk	EIMT of environmentally significant plant and equipment will be incorporated into an Asset Management System and appropriate surveillance arrangements developed. SZC will have an Environmental Maintenance Strategy Report 18 months prior to active commissioning. Commitment 8 outlines the SZC project's future developments in this area
THE ENVIRONMENT CASE The operator shall maintain an environment case, consisting of documents, which demonstrates the use of best available techniques to protect people and the environment throughout the life-cycle of the activities.	RSR Condition 2.3.1, 2.3.2; RSR REP RSM DP3 2 Activities and nature of the work	The SZC Co. Environment case is described in Supporting Document A1 of the RSR permit application.	SZC Co. will have implemented interim arrangements post application to manage the Environment Case while SZC Co. reviews and adopts the HPC project arrangements for managing the Environment Case to ensure it is updated to take account of design changes and to incorporate new evidence as it becomes available. The arrangements for tracking design open points, through procurement, manufacture, installation and ultimately operation will also be adopted. Existing HPC project guidance on environmental optimisation will also be reviewed and adopted as appropriate into the SZC project. The SZC Safety Director will be responsible for adoption or these arrangements during the development phase. The Environmental Manager will also be responsible for future environment case updates.	The Environment Case is being presented as part of the RSR application and will be maintained over as the project progresses through each phase according to the arrangements adopted from the HPC project. An update of the SZC Environment Case, including Open Points, Environmental Protection Function Register and Integrated Waste Strategy will take place after FID to capture any changes that have happened as a result of RC1. Readiness of the arrangements will be checked prior to any significant increase in project risk through the management of hold-points process.	It is anticipated that the arrangements for maintaining the environment case will remain throughout subsequent project phases and into the operation of the plant. The scale of activities is expected to continue at a relatively consistent pace into Operations, with no step change in activity anticipated.
CONTROL OF DESIGN Design changes must be controlled using a robust process which includes proportionate consideration of the impact of the proposed change on the environment case.	RSR Condition 2.3.1, 2.3.2; RSR REP RSM DP3 2 Activities and nature of the work	Under the replication strategy there will be strict governance over any deviations from replication baseline. Post RC1 full design control arrangements will be required. Prior to RC1 only arrangements supporting change control committee required. See Commitment 3.	The Director of Engineering is responsible to reviewing and adopting design control arrangements from the HPC project, as appropriate during the development phase. See Commitment 3.	The management of design changes arrangements are not anticipated to develop significantly prior to the construction phase. Readiness of the arrangements will be checked prior to any significant increase in project risk through the management of hold-points process. A suite of arrangements will be adopted during the construction phase to manage deviations / non conformances which may occur during construction of structures and manufacture and installation equipment. These procedures will also specify surveillance activities to check the design is implemented correctly.	Appropriate arrangements for the control of modifications during operation will be required prior to commissioning and operation of the plant. This is expected to be an evolution of the existing arrangements. Commitment 3 captures the SZC project's future development in this area
MONITORING AND ASSESSMENT The best available techniques, consistent with relevant guidance and standards, should be used to monitor and assess radioactive substances, disposals of radioactive wastes and the environment into which they are disposed.	RSR Condition 3.2; RSR REP RSM DP13 2 Activities and nature of the work	During the development and construction phases there is not anticipated to be any radioactive material present on the SZC site and therefore no need to carry out any monitoring for RSR compliance. The monitoring arrangements for the power station will develop as SZC project progresses throughout the project lifecycles phases. Requirements for each Lifecycle Phase will reflect the activities being undertaken. With respect to monitoring and the RSR permit, the two key areas are: - Development of an environmental monitoring programme which will be used for retrospective dose assessments; and, - Specification of equipment and development of monitoring requirements for SSC which include in-process monitoring, direct monitoring of discharges, and characterisation of radioactive waste. A pre-construction radiological environment baseline for the site has been established for the purposes of the Development Consent Order (DCO). Techniques documents outlining how monitoring will be carried out during operations will be adopted from the HPC Project sufficiently in advance of first use to enable review of applicability to SZC, training and testing of arrangements.	No further development of the monitoring arrangements is expected in this phase relevant to RSR compliance. Environmental management and monitoring plans to control the broader framework of environmental risks are expected to be developed in advance of start of work on site but it is not expected to have to include any specific radiological monitoring requirements.	During the development and construction phases there is not anticipated to be any unsealed radioactive material present on the SZC site and therefore no need to carry out any monitoring for RSR compliance. Arrangements will be adopted from the HPC project so the organisation can react in the unlikely event that contamination is discovered. The SZC project will ensure, via the design change and procurement arrangements described above, that any deviations from the specification for monitoring equipment or modification to the system design are managed appropriately. Arrangements and the implementation of a pre-operational radiological environmental baseline for the site and surroundings of the Power Station will be established prior to the active commissioning phase. Readiness of the arrangements will be checked prior to any significant increase in project risk through the management of hold-points process. An Environmental Monitoring Programme will be developed, documented and implemented in time for installation.	Environmental Monitoring Operating Instructions and Contracts will also need to be developed. Commitments 5 & 6 outlines the SZC project's future developments in this area.
CONTROL OF DISPOSALS 'Operating rules' will set conditions, limitations and mandatory restrictions on operation to ensure that the plant or process is kept in a condition which optimises environmental performance. Operating instructions are used to ensure the plant or process is operated as per the design or strategy.	RSR Condition 1.1.1, 2.3.1, 2.3.2, 2.3.3; 2 Activities and nature of the work	An Integrated Radioactive Waste Strategy has been developed to accompany the RSR application (supporting document A2). The RSR application also includes the commitment to update this document to become a fully integrated waste strategy post-FID.	SZC Co. will adopt the HPC Project's Control of nuclear matter procedure to ensure radioactive waste is not received onto the site once it is acquired. Although no contamination is expected on site, arrangements will be in place for the construction phase so the organisation can react if contamination were to be found.	Land quality arrangements will be implemented at the beginning of this phase. Documentation for the consignment of radioactive material will be prepared in advance of active commissioning. Readiness of the arrangements will be checked prior to any significant increase in project risk through the management of hold-points process.	Operating rules will be developed for the operation of systems and equipment that contribute to minimising the production of radioactive waste, ensuring a high degree of operability and defence in depth. Specifications will include, for example, controls on reactor coolant and fuel pond chemistry. The development of arrangements will ramp up in preparation for active commissioning. Key documentation will be replicated from HPC to the following timescales: Radioactive Waste Operating Procedures Report - 18 months prior to active commissioning Radioactive Waste Management and Disposal Readiness Report - be provided 6 months prior to active commissioning Commitment 9 &10 outlines the SZC project's future developments intentions in this area.

	Requirement	Development Phase		Construction Phase	Position by active commissioning and operations
		At point of application	Prior to Financial Investment Decision (FID)		
MANAGE PERFORMANCE IMPROVEMENT Organisations should learn from their own and others' experience so as to continually improve their ability to protect the environment. Processes for monitoring, review and audit activities relating to strategies, plans, goals, standards, processes, procedures, plant and systems, testing and validation procedures, environmental monitoring, inspections and investigations, non-conformances, incidents and events, and self and external assessments should be established.	RSR Condition 1.1.1; RSR REP MLDP5,	Assurance consists of internal independent review and external independent verification respectively. The latter makes use of competent external organisations, industry peer reviews and regulatory reviews and inspections. The exercise is aimed at identifying areas at risk of non-compliance with the RSR permit. The Perform Self Assessment Procedure (Ref. 13) and Perform Independent Assessment Procedure (Ref. 14) are dual badged HPC/SZC arrangements. The SZC Project will use the current HPC Project arrangements for Assurance and access suitable qualified and competent resource through the HPC IPSA.	The SZC Safety Director is accountable for Assurance and has a fully independent remit to assure the SZC project activities. The HPC project has established written arrangements for assuring the processes, procedures and the management system of the HPC project. These arrangements were developed both the HPC and SZC projects in mind and so will be adopted by the SZC project by the Director of Safety during the development phase. The HPC assurance management arrangements to be adopted are mature but will continue to develop as a key part of its compliance approach throughout the lifetime of the Project. The approach to assurance and associated procedures will be updated and improved based on operational experience and feedback.	The assurance management arrangements for the SZC project are based on the HPC project and are therefore mature but will continue to develop as a key part of the SZC project's approach to compliance throughout the lifetime of the project. The approach to assurance and associated procedures will be updated and improved based on operational experience and feedback.	It is anticipated that the current arrangements for undertaking assessment of performance will remain throughout subsequent project phases and into the operation of the plant. There is no step change in activity anticipated in this area required for operations.

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