



REPLAY Power, Inc.
7301 Seneca Falls Loop
Austin, Texas 78739
www.REPLAYpower.com

Enclosure 1

REPLAY Power Quality Assurance Program Development

Revision 0

July 2025

Table of Contents

1.0	Introduction.....	3
1.1	Contact Information	3
2.0	REPLOY Power Business Model	3
3.0	Licensing and Design Strategy.....	5
	Assembly & Fabrication - Central Assembly Facility	7
	Front End Fuel Activities – Central Fuel Facility	7
	Transportation – Deployment Vessels.....	7
	Deployment – Deployment Vessels & Site Structures	7
	Back End Activities – Central Fuel Facility	8
	Disposition – CFF & Waste Management Partners	8
4.0	Quality Assurance Approach	8
4.1	Quality Assurance Criteria	9
4.1.1	NQA-1	9
4.2	Corporate QAPD and QAMs	9
4.3	Corporate Quality Assurance, Central Fuel Facility, SPS Deployment / Operation, Site Permitting	10
4.3.1	Organization.....	10
4.3.2	Quality Assurance Program.....	11
4.3.3	Design Control	11
4.3.4	Procurement Document Control	12
4.3.5	Instructions, Procedures, and Drawings	12
4.3.6	Document Control.....	12
4.3.7	Control of Purchased Material, Equipment, and Services	12
4.3.8	Identification and Control of Materials, Parts, and Components	13
4.3.9	Control of Special Processes	13
4.3.10	Inspection	13
4.3.11	Test Control.....	13
4.3.12	Control of Measuring and Test Equipment.....	14
4.3.13	Handling, Storage and Shipping.....	14
4.3.14	Inspection, Test, and Operating Status	14
4.3.15	Nonconforming Materials, Parts, or Components.....	14
4.3.16	Corrective Action	14
4.3.17	Quality Assurance Records	14
4.3.18	Audits.....	15
4.4	Assembly Facility.....	15
4.5	Transportation.....	15
4.6	Waste Disposition	15
4.7	Environmental Analyses.....	16
5.0	Implementation Plan Development	19
6.0	References	19
	Appendix A. Quality Assurance Plan Format.....	21

1. Introduction

This white paper presents the approach REPLOY Power will take to develop the company Quality Assurance Program Description (QAPD), organize the quality assurance function, and outline the implementation plan. A brief explanation of the REPLOY Power business model is also presented, which will serve as the basis for the organization of the quality assurance function. Attachment A contains the proposed format for the follow-on quality assurance topical report

1.1. Contact Information

Donald J. Statile
Director of Licensing, Safety, and Quality Assurance
REPLOY Power Inc.

2. REPLOY Power Business Model

REPLOY Power is in the process of developing a Nuclear Quality Assurance-1 (NQA-1) and 10 CFR 50 Appendix B quality assurance program, with guidance from Black & Veatch.

The REPLOY Power Submersible Power System (SPS) is a power plant design intended to allow for standardization and rapid deployment of light water reactor technologies. The design features a relatively standard pressurized water reactor (PWR) in a containment structure designed for operation underwater at offshore sites. Centralized manufacturing, maintenance, refueling, waste storage, and decommissioning are expected to reduce the operating costs of individual units while ensuring public safety. The overall REPLOY Power SPS lifecycle is illustrated in Figure 1.

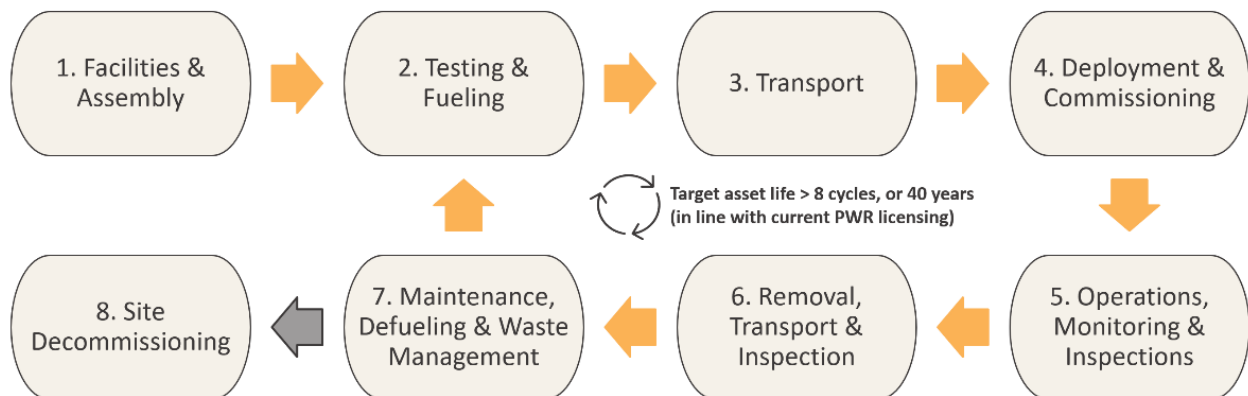


FIGURE 1. REPLOY SPS LIFECYCLE

The SPS makes use of state-of-the-art passive Small Modular Reactor technology packaged into a submersible containment vessel which also contains auxiliary systems and power generation and transmission systems. Conceptual design highlights for the SPS are included in Figure 2.

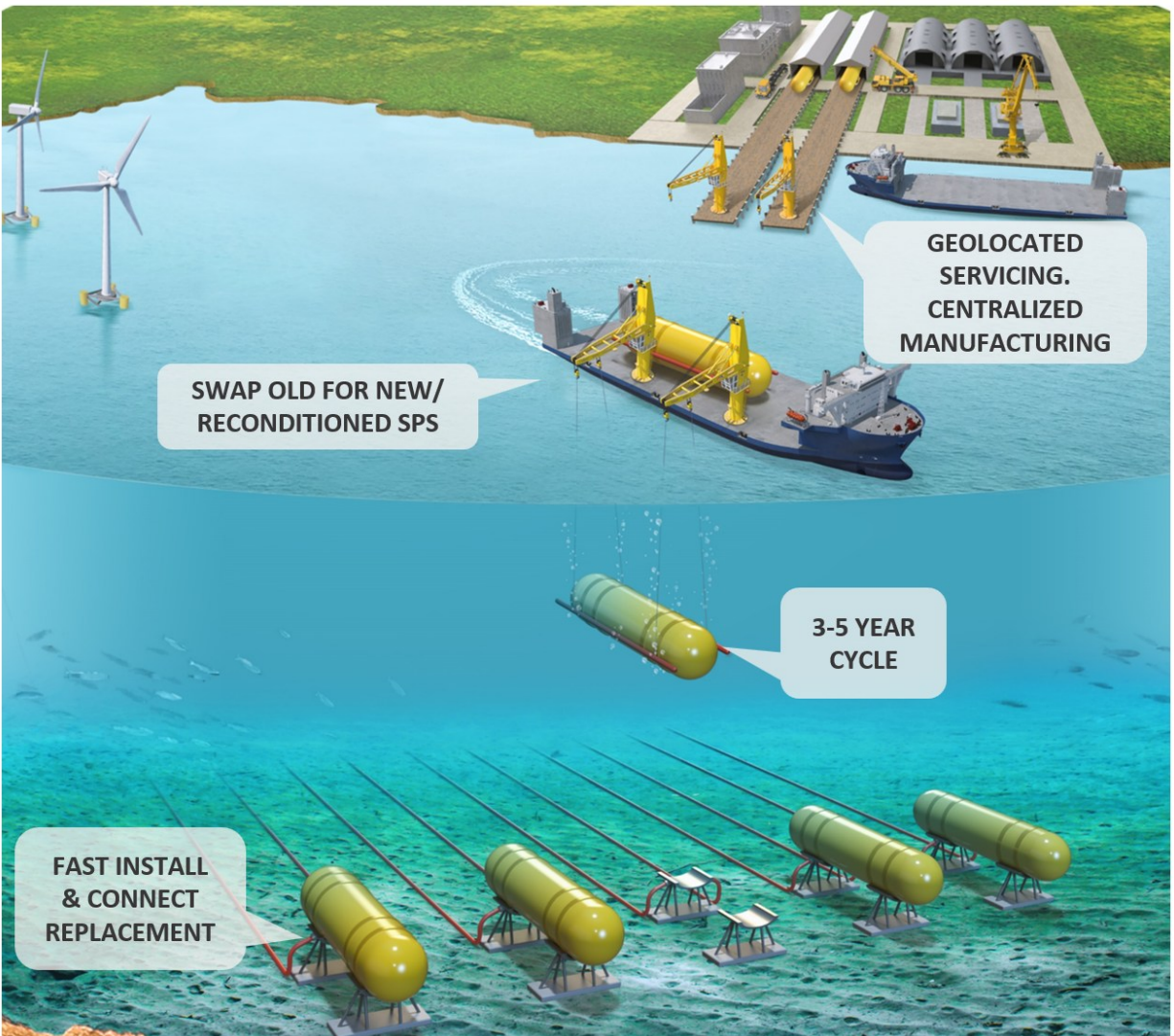


FIGURE 2. OVERVIEW OF SPS DEPLOYMENT CONCEPT

SPS units will be produced in a centralized facility which provides manufacturing, maintenance, refueling, and decommissioning services for the fleet of SPS units. The central facility will resemble a standard shipyard for construction of sea-going vessels. Such facilities regularly construct complex engineered vessels of size and mass exceeding that of the SPS. Transportation of the SPS by waterways allows for an entire PWR power plant to be delivered to an offshore site ready to operate.

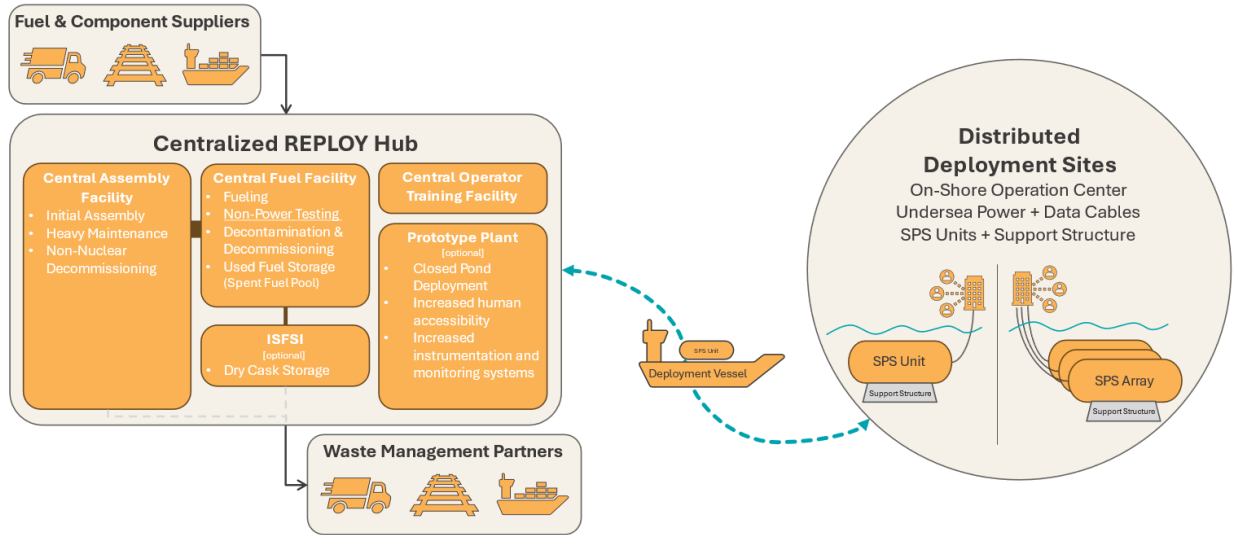


FIGURE 3. REPLOY POWER MODEL

3. Licensing and Design Strategy

In parallel to design phases for the SPS and the central facilities, REPLOY proposes to submit pre-application topics via whitepapers and licensing topical reports (LTRs). After the pre-application phase, REPLOY intends to submit a series of applications as described below.

Considering the currently available licensing pathways, Part 52 appears to be the most appropriate licensing framework for the SPS. REPLOY plans to leverage an existing nuclear steam supply system from a partner vendor, located within the SPS containment system. Under this paradigm, REPLOY plans to pursue a 10 CFR Part 52 Subpart F manufacturing license, for the SPS design, as well as modifications to the certified design of the reference PWR. However, an initial prototype plant may be licensed under the Part 50 framework by applying for a construction permit and subsequently an operating license under the Part 50 license framework. Nth-of-a-kind facilities will make use of Part 52, Subpart A, Early Site Permits, to address site specific topics and Part 52, Subpart C Combined Licenses for the plants.

REPLOY Power intends to use proven passive PWR technology, preferably by partnering with a known reactor technology vendor with a Part 52, Subpart B standard design certification for a nuclear steam supply system (NSSS). REPLOY will pursue a Subpart F Manufacturing License (ML) for the SPS containment system, non-nuclear balance of plant, and any other deviation from the certified design. This effort will be followed by a Subpart C combined license application for the combined plant with the integrated NSSS and SPS.

The central hub will contain a central assembly facility which will provide centralized assembly and heavy maintenance, and a central fuel facility which provides fueling, refueling, initial testing, and regular maintenance services. It is expected that the central fuel facility will house a spent fuel pool and dry interim storage like existing power reactor facilities. Thus, REPLOY segregate part of the

industrial hub for the assembly facility. A parallel Non-Power Utilization Facility operating license under 10 CFR 50 will be pursued for the conduct of nuclear activities, including fueling and zero power criticality testing. This Part 50 license will also cover reactor defueling, SPS decontamination and refurbishment of activated and contaminated equipment, and the operation of spent fuel pools. A third part of the facility will handle the disposition of nuclear waste and spent fuel. The intent is to package the spent fuel into casks and ship them offsite if that option exists. The waste handling will be licensed under the appropriate possession license (i.e., 10 CFR70). If REPLAY Power must perform interim storage, the spent fuel operations will be licensed under 10 CFR 72 as an Independent Spent Fuel Storage Installation (ISFSI). The above paragraph is illustrated in Figure 4. The breakdown of these activities is presented below.

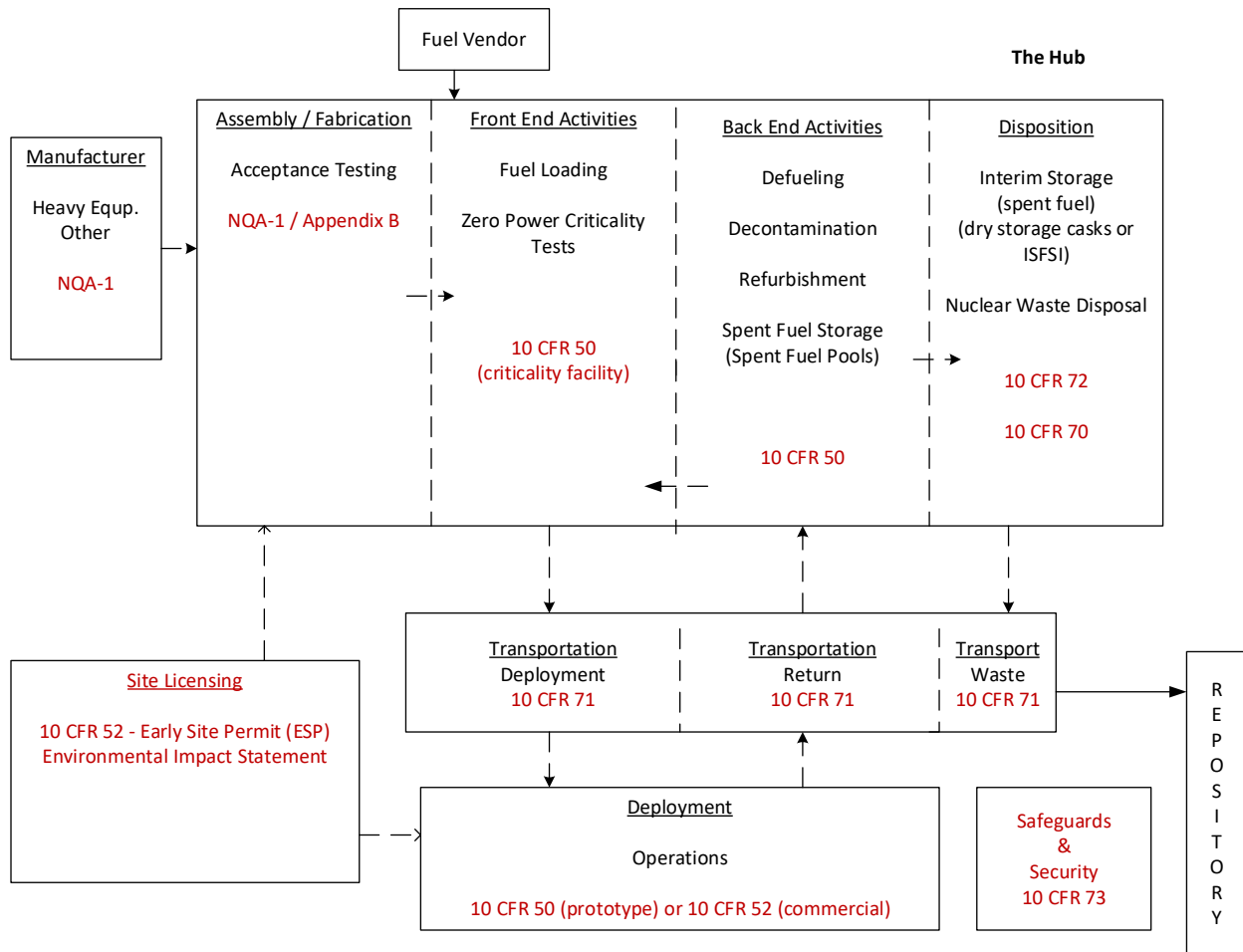


FIGURE 4. REPLAY Power Lifecycle and Regulatory Drivers

Assembly & Fabrication - Central Assembly Facility

- Most components shipped in from vendors including:
 - Reactor vessel
 - Steam generators
 - Pressurizer
 - Turbines
 - Generator
 - Condensers
 - Hull Segment Rings
- Fabricate SPS
- Assemble power plants.
- Regulatory Drivers
 - NQA-1 / Appendix B

Front End Fuel Activities – Central Fuel Facility

- Fuel loading
- Zero power criticality testing
- Regulatory Drivers
 - 10 CFR 50
 - Fueling
 - Criticality facility
 - Rely on 10 CFR 50.59 process.

Transportation – Deployment Vessels

- Fresh fueled reactor to deployment
- Return reactor from deployment with used fuel.
- Remove spent fuel at Hub?
- Waste shipments from hub to disposal under CoC.
- Regulatory drivers
 - 10 CFR 71
 - DOT regulations
 - IMO/IAEA regulations, as applicable, when transporting in international waters

Deployment – Deployment Vessels & Site Structures

- Site Preparations:
 - Support Structure Construction
 - Cable Laying and trenching
 - Control Center Construction
 - Reactor positioning

- Reactor operations
- Reactor decommissioning and removal from the site.
- Regulatory drivers
 - 10 CFR 52 Combined Operating License Application (COLA)
 - 10 CFR 50 (prototype)
 - 33 CFR Part 322 – Corps of Engineer Permit for Transmission Lines in Navigable Waters

Back End Activities – Central Fuel Facility (CFF)

- Defueling
- Decontamination
- Refurbishment of contaminated equipment
- Spent fuel storage.
 - Spent fuel pool.
 - Load in waste casks
- Regulatory drivers
 - 10 CFR 50

Disposition – CFF & Waste Management Partners

- Optional interim storage
 - Dry storage casks or Independent Spent Fuel Storage Installation (ISFSI)
- Radioactive waste disposal
- Regulatory drivers
 - 10 CFR 72, if interim storage option is used
 - 10 CFR 70, otherwise

4. Quality Assurance Approach

The REPLOY Power Quality Assurance Program Description (QAPD) will detail the quality assurance program for the entire company. This corporate program will be based on 10 CFR 50 Appendix B criteria. It will contain the requirements to be compliant with Appendix B as far as the commonality of nuclear activities as listed in the table in section 3.1. Specific requirements are requirements associated with individual activities, such as environmental permitting. These specific requirements will be presented in the implementing Quality Assurance Manuals (QAMs) (e.g., Environmental Permitting Quality Assurance Manual). When developed, QAMs will become appendices of the QAPD.

For example, document control is required for all activities. Therefore, the QAPD would implement most of the Quality Assurance (QA) document control requirements. On the other hand, the QA requirements driven by environmental regulations would be implemented under the Environmental QAM. The format of the QAPD is presented in Attachment A.

4.1. Quality Assurance Criteria

Table 1 lists the regulatory requirements and subsequent criteria for the predominant activities that will be conducted at REPLOY Power Facilities.

4.1.1. NQA-1

10 CFR 50.55a cites the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code (BPVC) as an acceptable standard to use in the design, testing and maintenance of structures, systems, and components (SSCs) associated with the primary pressure boundary. For PWRs, nuclear vendors utilize section III, section XI, and various code cases in support of primary system boundaries. ASME code is also used in relation to other systems that are important to safety. NQA-1 is an integral part of the BPVC.

NQA-1 states:

This Standard is to be applied to any structure, system, component, activity, or organization that is essential to the safe, reliable, and efficient performance of a nuclear facility and any activities independent of a facility that may affect performance (e.g., transportation of nuclear materials) of those activities. It is also to be applied to all phases of a nuclear facility life cycle (e.g., siting, design, construction, operation, and decommissioning) and all types of activities (e.g., training, testing, software development or use). The Standard also applies to activities that could affect the quality of nuclear material applications, structures, systems, and components of nuclear facilities.

NQA-1 provides an acceptable method for complying with 10 CFR 50 Appendix B, QA requirements. REPLOY Power will incorporate NQA-1 2022 into its QAPD.

4.2. Corporate QAPD and QAMs

The corporate quality assurance program description will meet the 10 CFR 50 Appendix B criteria for safety-related nuclear activities conducted companywide. It will contain common QA elements for the company. Quality Assurance criteria which only apply to specific activities will be implemented under the subsequent quality assurance manual for that activity (see Figure 5).

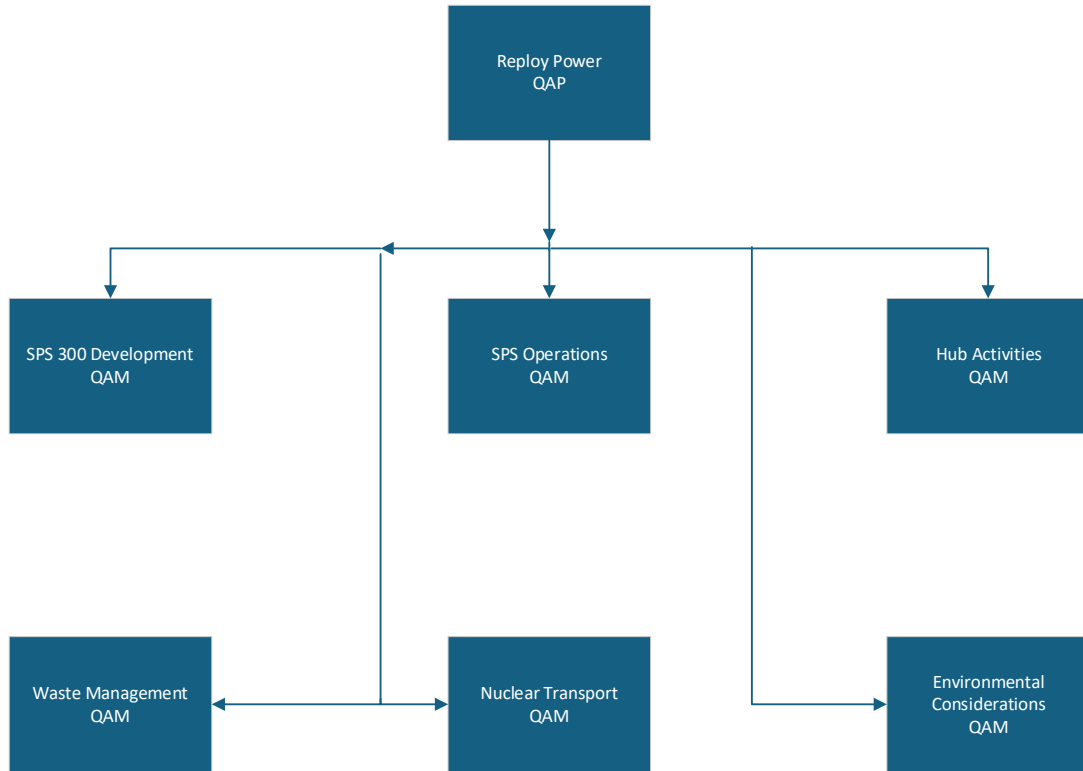


FIGURE 5. QUALITY ASSURANCE FLOW DOWN

4.3. Corporate Quality Assurance, Central Fuel Facility, SPS Deployment / Operation, Site Permitting

A prominent portion of REPLAY Power activities will be performed under 10 CFR 50 and 10 CFR 52. Therefore, the corporate QAPD will be based on 10 CFR 50 Appendix B. Activities and locations specifically under 10 CFR appendix B for quality assurance are the Central Fuel Facility, activities associated with the deployment of a prototype and commercial reactors, and site preparation associated with the Early Site Permit (10 CFR 52, Subpart A). Their QAMs will contain criteria that will be applied specifically to their activities. The eighteen quality assurance criteria, as presented in 10 CFR 50 Appendix B, are discussed below in relation to the QAPD and QAMs.

4.3.1. Organization

The company organization will be presented in the QAPD, with a specific focus on the quality assurance function and the management of other functional departments with QA specific duties. The QAMs will contain additional organizational focus relating to quality related activities for the central fuel facility, SPS deployment / operation, and site permitting activities.

4.3.2. Quality Assurance Program

The corporate QAPD will contain the overall corporate policies, procedures, and instructions related to QA. The QAPD will also identify the organizations participating in the QA function in conjunction with the corporate QA organization. General QA training will also be described in the QAPD. And the QAPD will address the steps that will be taken to assure the status and adequacy of the QA program.

The specific QAMs will address areas specific to their activities, including specific QA training, procedures, and instructions. The QAMs will identify organizations specific to their activities that will have a significant participatory role in QA. Identification of SSCs related to those activities that fall under the QAPD will be presented in the QAMs. Specific needs to address quality, such as training, tools, etc., as well as verification through tests and inspections, will be discussed in the QAMs.

4.3.3. Design Control

Design control aspects that will be applied corporatwide will be presented in the QAPD. Those aspects are presented below.

- Measures to assure appropriate quality standards
 - Includes safety-related SSCs
- Control of design deviations
- Design control process
 - Design change notification
 - Field change notification
- Configuration Control processes as applied to design control
- Records management

The QAMs will contain information specific to their activities including central fuel facility design, Prototype and commercial reactor design, and site preparatory activities in association with early site permitting. Items under the QAMs are listed below.

- Specifications
- Drawings
- Procedures
- Instructions

REPLOY Power will implement a Design Reliability Assurance Program (RAP) for risk significant SSCs. The program will be implemented according to the recommendations of SECY-95-132, "Policy and Technical Issues Associated with the Regulatory Treatment of Non-safety Systems (RTNSS) in Passive Plant Designs," Item E, "Reliability Assurance Program" (May 22, 1995). QA controls for safety-related systems will be derived from 10 CFR 50, Appendix B, as noted in the QAPD. Non-safety-related SSC QA controls will be derived under the guidance of SECY 94-084, Policy and Technical Issues Associated with the

Regulatory Treatment of Non-Safety Systems (RTNSS) in Passive Plant Designs, and NUREG-0800, section 17.5, Part V, Nonsafety-Related SSC Quality Controls.

4.3.4. Procurement Document Control

Procurement document control will be part of the corporate document control process and will ensure that the appropriate quality assurance and quality control measures are applied to the procurement process. That process will include the associated procedures and forms. Additional procedures, forms, and instructions specific to the activities of the central fuel facility, SPS, or site preparation will be presented in the specific QAMs.

4.3.5. Instructions, Procedures, and Drawings

Instructions, procedures, and drawings for activities affecting quality will be presented in the QAPD if they are generally applied across the company. Instructions, procedures and drawings for specific activities unique to a location's activities will be presented in the QAMs. The QAMs will also contain the quantitative and qualitative acceptance criteria for those activities.

4.3.6. Document Control

The issuance of documents for all activities affecting quality will be described under the corporate document control process in the QAPD. A list of representative documents and associated activities is presented below.

- Instructions
- Procedures
- Drawings
- Design change documentation
- Revisions
- Reviews
- Release process

The QAMs will present the specific activity procedures that tie into the corporate document control process.

4.3.7. Control of Purchased Material, Equipment, and Services

Since the procurement process is universal across REPLOY Power, much of the procurement process will be contained in the QAPD. The QAMs will contain specific instructions tying the activities of that function into the corporate QAPD. The QAPD will include actions to ensure that procurement activities are conducted via procurement documentation. Some of the major QAPD procurement functions are listed below.

- Evaluation and selection

- Evidence of quality from contractors and subcontractors (assessments)
- Inspection of product at the contractor's location (audit)
- Receipt of product (receipt inspection)
- Documentation (procurement document control)
- Records retention protocol

4.3.8. Identification and Control of Materials, Parts, and Components

Identification and control of materials, parts, and components, including partially fabricated assemblies, will occur throughout REPLOY Power and will be addressed in the QAPD. The traceability of materials, parts and components throughout fabrication, erection, installation and use is specific to activities such as SPS assembly or Central Fuel Facility. Therefore, this traceability will be addressed in specific QAMs.

4.3.9. Control of Special Processes

The establishment of measures to ensure that special processes are controlled and accomplished by qualified personnel using qualified procedures will be described in the QAMs for those activities. Applicable codes, standards, specifications, criteria and other special requirements will also be identified in the QAMs.

4.3.10. Inspection

The inspection program for activities affecting quality will be established under the QAPD. The organizations performing these inspections are the same organizations that are performing the activity. They will be identified in their respective QAMs. The conduct of those inspections may include process monitoring which will also be described in the respective QAM.

4.3.11. Test Control

A companywide test program will be established under the QAPD. That program will include provisions for assuring that all prerequisites for the given test have been met, that adequate test instrumentation is available and used, and that the test is performed under suitable environmental conditions. The program will also address the documentation of test records and the evaluation of satisfactory accomplishment of testing requirements. The test program will address the identification of testing prerequisites, the assurance of adequacy of testing instrumentation, and the specification of environmental conditions.

The specific performance requirements of the tests will be established under the corresponding QAMs. The QAMs will contain instructions incorporating performance requirements and acceptance limits contained in design documents. Specific testing prerequisites, the assurance of adequacy of testing instrumentation, and the specification of environmental conditions will be identified in the QAMs.

4.3.12. Control of Measuring and Test Equipment

Generic programmatic operation of measuring and test equipment will be presented in the QAPD. The items presented will be the establishment and operation of a metrology department and calibration services. The specifics will be addressed in the QAMs.

4.3.13. Handling, Storage and Shipping

The QAPD will describe the generic measures taken to control the handling, storage, shipping, cleaning, and preservation of material and equipment in accordance with work and inspection instructions. The treatment of specific products will be addressed at the QAM level, which addresses the activities performed and will address the specific control measures prescribed.

4.3.14. Inspection, Test, and Operating Status

Labeling and markings guidance related to inspections and tests will be described under the QAPD. The companywide lockout tagout procedure will also be developed to prevent inadvertent use of equipment. Specific requirements for activities and associated locations associated with lockout/tagout and other labeling requirements will be addressed under their corresponding QAM.

4.3.15. Nonconforming Materials, Parts, or Components

Nonconforming parts represent a serious risk to the reliability and operability of safety-related SSCs. The QAPD will address the prevention and discovery of nonconformance. The program will contain a process that is compliant with 10 CFR 21, Reporting of Defects and Noncompliance.

4.3.16. Corrective Action

When conditions adverse to quality are identified, the QAPD will address a process to assure that the issue is corrected and that measures are taken to prevent recurrence. This process will include causal analysis, the addressing of conditions adverse to safety, and the documentation of the issue.

4.3.17. Quality Assurance Records

REPLOY Power will develop a document control system that is compliant with 10 CFR 50, Appendix B and based on NQA-1. The system will address the capture, storage, retrievability, and retention of records. Specific processes, as identified in the QAMs, will have direct links to the document control system. The responsibilities for document control and records management will be identified, as appropriate, in the QAPD and QAMs.

4.3.18. Audits

A compliant Appendix B / NQA-1 compliant audit program will be developed under the QAPD. The program will include training requirements for auditors, procedures for the conduct of audits, and the records requirements associated with those audits. Measurement criteria will be established and documented, and corrective actions will be initiated, as appropriate.

4.4. Assembly Facility

The assembly facility will not contain any radioactive material (certified sealed sources excepted), nor will it handle any nuclear fuel. As such, the assembly facility will not be licensed as a nuclear facility. While a non-nuclear facility does not have any specific QA requirements, the product assembled will be a commercial reactor licensed under 10 CFR 52. A prototype will first be assembled and subsequently licensed under 10 CFR 50. Therefore, much of the manufacturing and assembly will be conducted under the auspices of 10 CFR 50, Appendix B and in particular NQA-1 as required by the ASME Boiler and Pressure Vessel Code and other ASME coding requirements. Subcontractors will also be subject to those criteria via the procurement controls implemented under the REPLOY Power QA Program. The QAM for the assembly facility will address the application of specific QA requirements as they apply to the assembly processes and procurement.

4.5. Transportation

The commercial transportation of radioactive material is regulated under 10 CFR 71, Packaging and Transportation of Radioactive Material. Among other things, Subpart H describes the QA program and requirements for 10 CFR 71 activities. Under Subpart H, 10 CFR 71.101 addresses quality assurance requirements.

- (a) **Purpose.** *This subpart describes quality assurance requirements applying to design, purchase, fabrication, handling, shipping, storing, cleaning, assembly, inspection, testing, operation, maintenance, repair, and modification of components of packaging that are important to safety.*

An applicant may use an approved 10 CFR 50, Appendix B, compliant QA program in lieu of a 10 CFR 71, Subpart H, compliant QA program. It is the intent of REPLOY Power to get approval of the 10 CFR 50, appendix B QAPD. The QAM for transportation then takes credit for the approved QAPD and will cross walk the portions of the QAPD that relate to the Subpart H requirements to demonstrate compliance for activities under 10 CFR 71.

4.6. Waste Disposition

The waste facility will handle waste operations including the disposition and shipment of radwaste, and the disposition and shipment of spent fuel casks. The casks themselves will be loaded in the central fuel facility and will be returned to that facility if the unloading of a waste cask is required. The intent of REPLOY Power is to ship the waste out of the facility rather than perform interim storage. As such, the waste facility will be operated under 10 CFR 70. 10 CFR 70 has no direct QA requirements. However, to aid in the shipping process the activities will comply with 10 CFR 71,

Subpart H requirements or their 10 CFR 50 Appendix B equivalent, as defined in the Waste Disposition QAM.

If a disposal path is not available for the disposition of spent fuel, REPLOY Power will license ISFSI facilities per 10 CFR 72. As such, the QA requirements are defined in part 72 under Subpart G. An applicant may use an approved 10 CFR 50, Appendix B, compliant QA program in lieu of a 10 CFR 72, Subpart G, compliant QA program. It is the intent of REPLOY Power to get approval of the 10 CFR 50, appendix B QAPD. The QAM for transportation then takes credit for the approved QAPD and will cross walk the portions of the QAPD that relate to the Subpart G requirements to demonstrate compliance for activities under 10 CFR 72.

4.7. Environmental Analyses

The performance of Environmental Analyses is based on criteria beyond those in usual 10 CFR Appendix B. Some of the specific QA requirements are listed below and summarized in Table 1.

10 CFR 51—Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions

10 CFR 51 specifies the need for an Environmental Impact Statement (EIS) and supporting environmental reporting. It refers to interagency relations.

2011/01/14 – NRC Pre-filed Exhibit NRC 000077, Chapter 4, Preparing an Environmental Impact Statement: Process (ML110140726)

This document provides guidance to the NRC for initial EIS development. The developers are to identify and evaluate QA measures taken by the applicant in collecting and analyzing data. Quality assurance, including verification and validation, are also evaluated where computer models have been used to predict environmental consequences of the proposed actions.

CIO 2105-P-01-0, Quality Manual for Environmental Programs

This annual specifies the QA requirements for environmental data collection and environmental tech programs performed by and for this agency. Minimum specifications for quality management functions and activities necessary to support Environmental Protection Agency (EPA) environmental program and satisfy the requirements of EPA Order 5360.1, CHG2. This EPA order is the predecessor of CIO 2105-P-01-0.

EPA QA/G-11: Guidance on Quality Assurance for Environmental Technology Design, Construction, and Operation

This document refers to NSI/ASQC E4-1994.

NSI/ASQC E4-1994

This American National Standard specifies requirements for a Quality Management System (QMS) to enable an organization to formulate policies and procedures to plan and implement sufficient and adequate quality management practices for environmental programs.

The QAM for environmental analysis will address the QA criteria derived from the documents above. A crosswalk will be developed between REPLOY Power's 10 CFR 50, Appendix A compliant QAPD

and the environmental QA criteria. The crosswalk (gap analysis) will accomplish two tasks. First, it will identify where the QAPD meets environmental QA criteria. Second, it will identify gaps in the QAPD where environmental QA criteria are not met. The Environmental Analysis QAM will specify how REPLOY Power plans to meet those criteria.

TABLE 1. QUALITY ASSURANCE REQUIREMENTS & CRITERIA

Activity	Regulatory Requirement	Criteria
Reactor/SPS Application	10 CFR 52	10 CFR 52.3 Written Communications (b)(7): refers to 10 CFR 50 Appendix B
Prototype	10 CFR 50	10 CFR 50 Appendix B
Commercial Reactor	10 CFR 52	10 CFR 50 Appendix B
Transportation	10 CFR 71	10 CFR 71 Subpart H
Spent Fuel Storage and Waste Disposition	10 CFR 72	10 CFR72 Subpart G
Hub Nuclear Activities: fueling, defueling, maintenance, spent fuel pool operations, criticality (zero power) testing	10 CFR 50	10 CFR 50 Appendix B
Hub Assembly Facility (non-nuclear front end)	No regulatory driver	<p>While the facility does not require a license from the NRC, the power plant assembly could be authorized under Part 52 Manufacturing License (Subpart F). This leads to the assembly process to be governed by 10 CFR 50 Appendix B, but not the facility in general.</p> <p>Also, the primary boundary assembly, under ASME’s Boiler and Pressure Vessel Code, particularly Div III and Div VIII, implies NQA-1 for that portion of the assembly process.</p>
Site Permitting	10 CFR 52 (Early Site Permit)	10 CFR 52.3 Written Communications (b)(7): refers to 10 CFR 50 Appendix B
Environmental Permitting and Analyses (Support for an Environmental Impact Statement)		<p>PART 51—Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions</p> <ul style="list-style-type: none"> Specifies the need for an EIS and supporting environmental reporting. Refers to interagency relations. <p>CIO 2105-P-01-0: QUALITY MANUAL FOR ENVIRONMENTAL PROGRAMS</p> <ul style="list-style-type: none"> Requirements for the Mandatory Agency-wide Quality System, provides requirements for the conduct of quality management practices, including quality assurance (QA) and quality control (QC) activities, for all environmental data collection and environmental technology programs performed by or for this Agency. Minimum specifications for quality management functions and activities necessary to support EPA environmental programs and satisfy requirements of EPA Order 5360.1, CHG2. <p>2011/01/14-NRC Prefiled Exhibit NRC000077, Chapter 4, Preparing an Environmental Impact Statement: Process (ML110140716)</p> <ul style="list-style-type: none"> In evaluating the applicant’s environmental information, the environmental PM and other technical reviewers should identify and evaluate the quality assurance measures taken by the applicant in collecting and analyzing data. Quality assurance measures, including verification and validation, are also evaluated where computer models have been used to predict environmental consequences of the proposed actions. <p>EPA QA/G-11: Guidance on Quality Assurance for Environmental Technology Design, Construction, and Operation</p> <ul style="list-style-type: none"> Refers to ANSI/ASQC E4-1994 <p>ANSI/ASQC E4-1994</p> <ul style="list-style-type: none"> This American National Standard specifies requirements for a Quality Management System (QMS) to enable an organization to formulate policies and procedures to plan and implement sufficient and adequate quality management practices for environmental programs.

5. Implementation Plan Development

REPLOY Power will take a phased approach to the implementation of Quality Assurance. As the company initiates activities, the QAPD and associated QAMs will be implemented. For example, REPLOY Power is initiating its design efforts for the SPS. However, the operation of the SPS will occur sometime in the future. Therefore, the QAM associated with design will be implemented in conjunction with the start of the conceptual design. The QAM for nuclear operations will be implemented later when operations related activities commence

6. References

- 10 CFR 21, Reporting of Defects and Noncompliance, U. S. Nuclear Regulatory Commission
- 10 CFR 50, Domestic Licensing of Production and Utilization Facilities, U. S. Nuclear Regulatory Commission
- 10 CFR 51, Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions, U. S. Nuclear Regulatory Commission
- 10 CFR 52, Licenses, Certifications, And Approvals for Nuclear Power Plants, U. S. Nuclear Regulatory Commission
- 10 CFR 70, Domestic Licensing of Special Nuclear Material, U. S. Nuclear Regulatory Commission
- 10 CFR 71, Packaging and Transportation of Radioactive Material, U. S. Nuclear Regulatory Commission
- 10 CFR 72, Licensing Requirements for the Independent Storage of Spent Nuclear Fuel, High-level Radioactive Waste, And Reactor-related Greater Than Class C Waste, U. S. Nuclear Regulatory Commission
- ANSI/ASQC E4-1994, Quality management systems for environmental information and technology programs—Requirements with guidance for use, American National Standards Institute / American Society for Quality Control, 1994
- CIO 2105-P-01-0, Quality Manual for Environmental Programs, U. S. Environmental Protection Agency, 5/5/2000
- EPA QA/G-11: Guidance on Quality Assurance for Environmental Technology Design, Construction, and Operation, U. S. Environmental Protection Agency, 1/2005
- NRC Pre-filed Exhibit NRC 000077, Chapter 4, Preparing an Environmental Impact Statement: Process (ML110140716), U.S. Nuclear Regulatory Commission, 2011/01/14
- SECY-95-132 Policy and Technical Issues Associated with the Regulatory Treatment of Non-Safety Systems (RTNSS) In Passive Plant Designs (SECY-94-084) (ML003708005), U.S. Nuclear Regulatory Commission, 5/22/1995
- SECY-94-084 Policy And Technical Issues Associated With The Regulatory Treatment Of Non-Safety Systems in Passive Plant Designs (ML003708068), U.S. Nuclear Regulatory Commission, 3/28/1994
- NUREG-0800 Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants: LWR Edition (NUREG-0800, Formerly issued as NUREG-75/087), U.S. Nuclear Regulatory Commission, 03/2007

Appendix A. Quality Assurance Plan Format

1. Introduction
2. Quality Assurance Program Description
 - 2.1. Organization
 - 2.2. Quality Assurance Program
 - 2.3. Design Control
 - 2.4. Procurement Document Control
 - 2.5. Instructions, Procedures, and Drawings
 - 2.6. Document Control
 - 2.7. Control of Purchased Materials, Equipment, and Services
 - 2.8. Identification and Control of Materials, Parts, and Components
 - 2.9. Control of Special Processes
 - 2.10. Inspection
 - 2.11. Test Control
 - 2.12. Control of Measuring and Test Equipment
 - 2.13. Handling, Storage, and Shipping
 - 2.14. Inspection, Test, and Operating Status
 - 2.15. Nonconforming Materials, Parts, or Components
 - 2.16. Corrective Action
 - 2.17. Quality Assurance Records
 - 2.18. Audits
3. Quality Assurance Controls for Non-Safety Related SSCs
 - 3.1. Non-Safety Related SSCs: Significant Contributors to Plant Safety
 - 3.2. Non-Safety Related SSCs Credited for Regulatory Events
4. Regulatory Commitments: Guides and Standards