



HENRY DARGAN MCMASTER
GOVERNOR

March 20, 2026

The Honorable Chris Wright
Secretary of Energy
U.S. Department of Energy
1000 Independence Ave., SW
Washington, DC 20585

Dear Secretary Wright,

President Trump has called for a nuclear renaissance, and South Carolina is at the vanguard of that movement. Bringing the nation's first fully integrated Nuclear Lifecycle Innovation Campus to this state would be the great next step for the United States and South Carolina. We are therefore excited to respond to the Department of Energy's request for information and to partner with you in strengthening America's nuclear future.

South Carolina is uniquely positioned to host this campus. Our state is home to the Savannah River Site, the Savannah River National Laboratory, and seven operating reactors which generate more than half of our electricity. In addition, as you know, the South Carolina Public Service Authority (Santee Cooper) is pursuing the completion of Units 2 and 3—two AP1000s—at V.C. Summer, one of the most significant opportunities for new nuclear generation in the United States. With all these nuclear facilities, we maintain one of the nation's highest concentrations of nuclear workers, supported by tremendous advanced manufacturing capabilities, the most effective technical college system, and research universities expanding programs in nuclear engineering, materials science, cybersecurity, and advanced manufacturing.

In preparing the state's response to the Department's request for information, we assembled a cross-sector steering committee including leaders from state government, research universities, the Savannah River National Laboratory, utilities, private industry, workforce institutions, and economic development organizations. This effort demonstrates that our team is organized, aligned, and ready to move. Without doubt, we have the experience, workforce, infrastructure, and commitment needed to help lead America's nuclear resurgence.

South Carolina is excited to work closely with the Department of Energy to advance a Nuclear Lifecycle Innovation Campus that reflects both our nation's nuclear legacy and its energy future.

Yours very truly,

A handwritten signature in blue ink, appearing to read "Henry D. McMaster", with a stylized, cursive script.

Henry Dargan McMaster

HDM/cgs/wgl

Introduction

South Carolina: America's first fully integrated Nuclear Lifecycle Innovation Campus

The United States has a generational opportunity to reclaim global leadership across the full nuclear lifecycle. This will strengthen energy dominance, reinforce national defense readiness, secure domestic production of life-saving medical isotopes, and reclaim nuclear export leadership. Seizing this opportunity will require an integrated ecosystem. South Carolina is prepared to launch America's first fully integrated Nuclear Lifecycle Innovation Campus to execute lifecycle operations and secure the next era of American nuclear dominance. The State—from the Governor to legislators, from private sector leaders in nuclear materials management who have expressed interest in South Carolina to our State's existing private sector players who have led in nuclear operations and deployment for decades, from higher education and research pioneers to nuclear advocates, from workforce development champions to community leaders—all stand committed and energized to deliver this critical national priority.

Vision and 2027 goals

The Innovation Campus is projected to generate ~2-5 GW of new nuclear energy, unlock \$60B+ in private capital, create ~40K construction and ~15K direct jobs, and catalyze growth across advanced manufacturing, defense, shipbuilding, and medical innovation (e.g., isotope production) propelling the State and region to serve as a global exemplar.

To deliver this vision at scale, the Innovation Campus executes on three coordinated pillars that resolve the most constrained and risk-sensitive portions of the U.S. nuclear value chain:

- I. **Innovate the backend fuel cycle:** Advance proliferation-resistant reprocessing R&D, minimization and disposition of waste streams, AI-enabled cleanup technologies, and scalable lifecycle stewardship.
- II. **Lead secure nuclear reactors and systems:** Embed advanced, real-time cybersecurity, material control, AI monitoring, and export-ready safeguards into reactor deployment, particularly new and innovative designs, including Small Modular Reactors (SMRs) and Micro Modular Reactors (MMRs).
- III. **Deliver national security-aligned infrastructure:** Design a layered infrastructure model, integrating grid-connected SMRs, critical-need MMRs, and secure microgrids to support energy dominance, while leveraging South Carolina's strong

advanced manufacturing foundation to engage private industry and enable the scaled production of innovative reactor designs.

The Innovation Campus will integrate a primary cluster of assets in Aiken and Barnwell Counties (with potential sites at the federally owned Savannah River Site (SRS) and in adjacent areas) connected to existing statewide satellite locations, including commercial fuel fabrication in Columbia, operating reactor sites, university research centers and testbeds, and port infrastructure in Charleston and Savannah, Georgia.

South Carolina recognizes the urgency with which DOE is moving and is confident in its ability to mobilize rapidly. Assuming timely federal-state coordination, by the end of 2027:

- Department of Energy (DOE), National Nuclear Security Administration (NNSA), SRS and Savannah River National Lab (SRNL) will have expanded reprocessing and interim storage readiness and capabilities at H Canyon (per the already planned, DOE-aligned restart effort)
- South Carolina will have launched a Nuclear AI & Cybersecurity Institute with the Army Cyber Center of Excellence
- SC Technical College System and other partner universities will have graduated its first nuclear workforce certification cohort
- State and utility partners will have completed feasibility assessments for SMR and MMR manufacturing and deployment
- DOE will have completed feasibility assessments for license extensions for the Salt Waste Processing Facility (SWPF) and Defense Waste Processing Facility (DWPF)

Operationalizing at speed and scale

A collaborative model: SC Nexus, SRNL, SRS, higher education, private sector

The Innovation Campus will be part of South Carolina's leading energy and nuclear ecosystem. The State already knows how to coordinate resources around a catalytic bet: two years ago SC NEXUS was launched, the nation's only U.S. Department of Commerce-designated statewide advanced energy technology hub. SC NEXUS coordinates federal partners, industry, universities, and workforce systems to enable aligned strategy and unified execution across the State. Already, SC NEXUS is delivering \$1.70 for every \$1 invested.

SRS and SRNL anchor the State's nuclear capabilities and form one of the nation's most strategically significant nuclear enterprise platforms—forged through decades of DOE mission execution across materials processing, fuel cycle operations, safeguards, environmental stewardship, and advanced reactor innovation. SRNL serves as the

technical backbone of this ecosystem, translating research into deployable solutions, accelerating technology maturation, and enabling commercialization pathways that strengthen U.S. nuclear competitiveness.

South Carolina's colleges and universities, including several of the nation's leading research institutions with deep nuclear and energy capabilities (including Clemson University, Medical University of South Carolina, South Carolina State University, and University of South Carolina), form a strong research and innovation network across nuclear engineering, advanced fuels and materials, radiochemistry and separations, cybersecurity, grid resilience, and workforce development. Many institutions maintain structured collaborations with SRNL, creating sustained linkages between research, workforce training, and industry needs. Collectively, this higher education network provides the talent pipeline and innovation capacity necessary to support the Innovation Campus at scale. South Carolina's Technical College system is a recognized global leader in workforce training and already has deep experience in the nuclear industry due to the State's existing nuclear assets. The State also hosts a concentrated nuclear and advanced manufacturing base with leading global players including Westinghouse (commercial fuel fabrication), Duke Energy (reactor operations and grid integration), Eaton, Honeywell, Siemens, Rolls-Royce, and others. This industrial strength is further reinforced by South Carolina's defense industrial ecosystem tied to energy security, including the Navy's nuclear enterprise and associated suppliers that support nuclear propulsion, advanced manufacturing, and specialized workforce development. These partners contribute component manufacturing capacity, operational expertise, capital readiness, and potential offtake demand. To develop the Innovation Campus, private-sector partnerships will be formalized to identify required commercialization pathways that translate capabilities into deployable, market-ready assets.

Nuclear workforce and workforce development

South Carolina already supports ~16K nuclear-related professionals—one of the most concentrated nuclear workforce bases in the country—and the Innovation Campus will roughly double that capacity at full buildout. Through best-in-class, execution-ready training and apprenticeship pipelines led by the SC Technical College System and the proven readySC model, the State can rapidly credential and deploy additional skilled workers within six months of DOE authorization. Dedicated scholarship programs are positioned to immediately expand the nuclear talent pipeline. South Carolina's deep integration with the U.S. military—including Navy nuclear training operations in Charleston—reinforces a workforce culture defined by safety, discipline, and mission

execution. The Innovation Campus will elevate the State's already strong nuclear workforce base into the largest and most deployment-ready nuclear workforce in America.

Physical Infrastructure

South Carolina's aptitude for nuclear lifecycle management extends well beyond fabrication and operation. The region's logistical strengths are accentuated by a network of inland and deepwater ports, notably the Port of Charleston, the eighth largest U.S. container port and the deepest port on the eastern seaboard, as well as the Port of Savannah, the third-busiest container gateway in the U.S. and the fastest growing on the east coast. The State is also home more than 2,000 miles of Class I freight rail—a system that is projected to transport 107 million tons of goods, valued at \$228B, per year by 2050. In anticipation of the growth of the State's highway freight demand to over 743 million tons per year by 2050, South Carolina's Department of Transportation Commission approved the agency's 2026 Pavement Improvement Plan, which added \$576 million in funding to the previously invested \$4.8B in pavement improvements for the State's highway system. These multimodal transportation assets are already deployed today in the movement of nuclear materials and are prepared to provide the capacity and operational readiness necessary to accommodate future expansion of nuclear lifecycle activities.

South Carolina's Competitive Advantage

South Carolina brings unmatched capability to stand up the nation's first fully integrated Nuclear Lifecycle Innovation Campus—not by building from scratch, but by activating a trifecta of federal, research, and industrial capability anchored at the Savannah River Site, Savannah River National Laboratory, and SC NEXUS. Nowhere else in the country does DOE have this combination of mission-proven infrastructure, safeguards culture, advanced research depth, and execution-ready industry alignment in a single ecosystem. With these assets already in place, South Carolina is well-suited to launch an Innovation Campus on DOE's accelerated timeline and decisively restore American leadership across the full nuclear lifecycle.

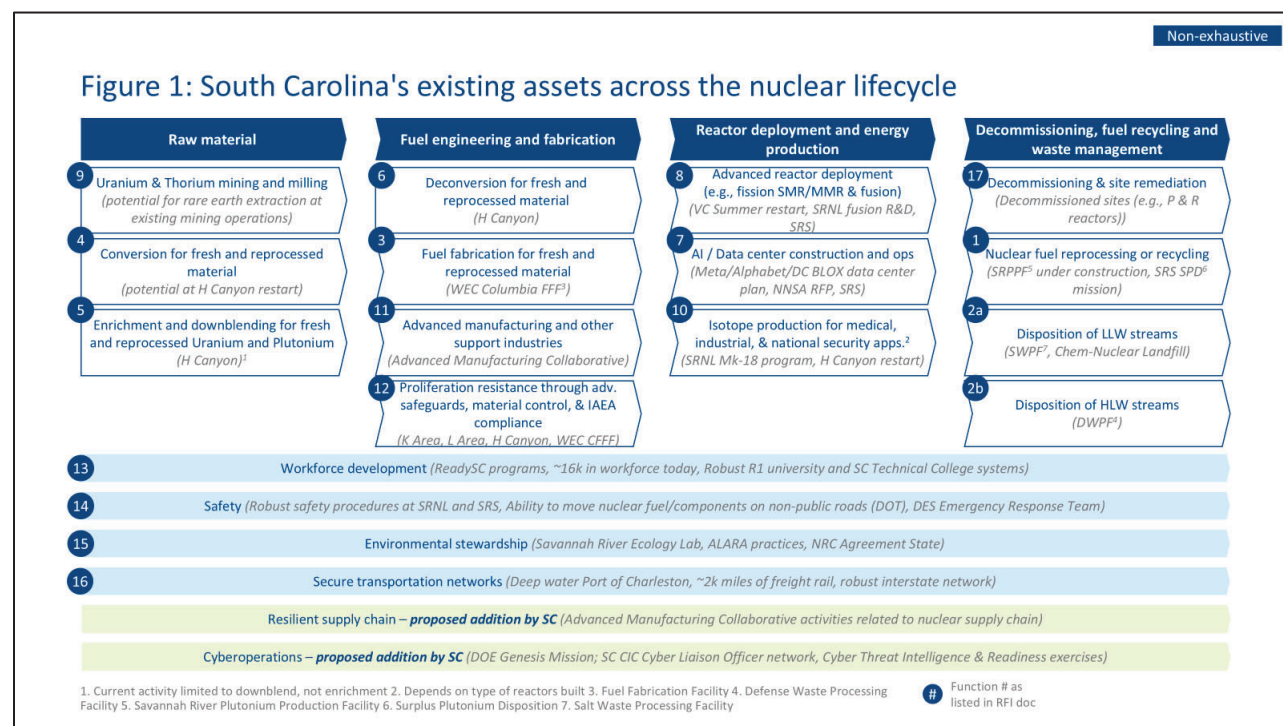
RFI question responses

1. State Interest

South Carolina is energized by the opportunity to host a comprehensive Nuclear Lifecycle Innovation Campus (NLIC) aligned with national priorities in energy dominance, nuclear deployment, and fuel cycle innovation.

The United States faces a structural nuclear lifecycle challenge. Fragmented fuel cycle capabilities, backend waste bottlenecks, insufficient domestic deployment infrastructure, and uranium supply constraints limit progress toward energy security, national defense readiness, and long-term fuel resilience. DOE's call for integrated Innovation Campuses reflects the need for co-located, full-lifecycle ecosystems to accelerate deployment, strengthen safeguards, and attract private capital at scale.

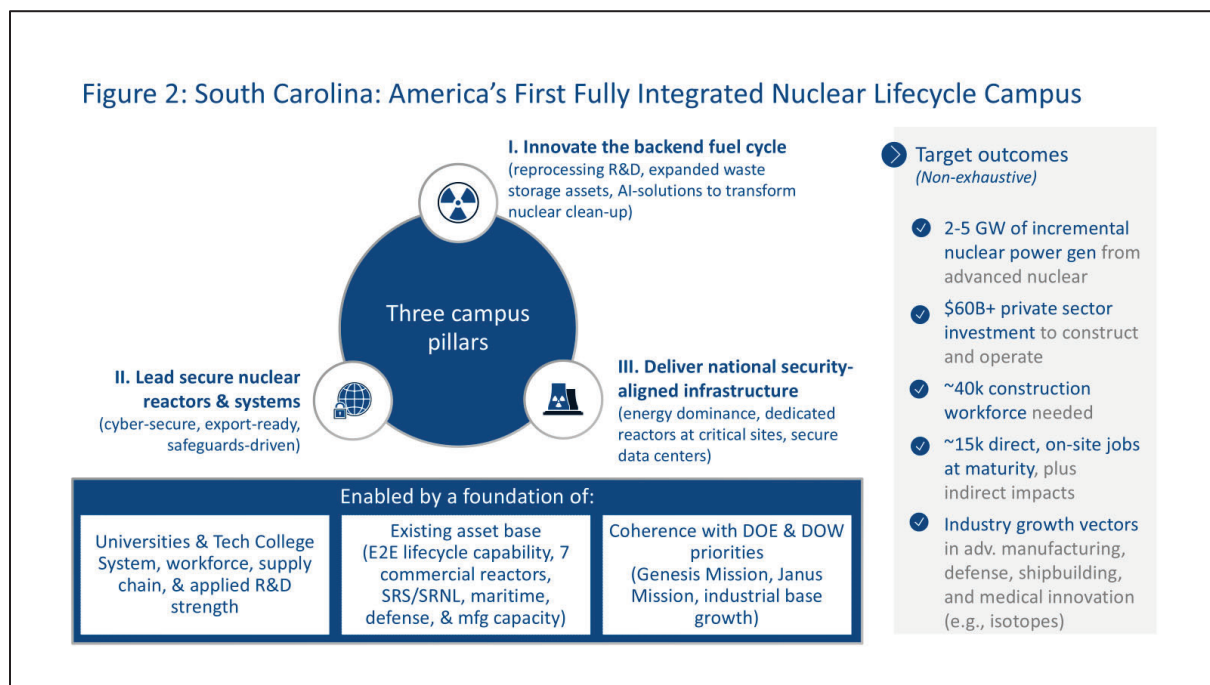
South Carolina is uniquely positioned to operationalize this model at speed and scale, with few state peers able to match its combination of federal assets, nuclear manufacturing presence, and workforce depth. The State brings together federally controlled land and assets at the Savannah River Site (SRS), decades of fuel cycle expertise at Savannah River National Laboratory (SRNL), a ~16K-person nuclear workforce, and SC NEXUS, the federally designated Advanced Energy Tech Hub that coordinates industry, universities, and workforce development. See Figure 1 for a detailed view of the existing asset foundation in South Carolina across SRS, SRNL, and private sector-owned facilities.



The State also enjoys the engagement of major private-sector nuclear and advanced manufacturing partners, including Westinghouse, Eaton, Honeywell, Duke Energy, Siemens, Rolls Royce, and other firms active across fuel fabrication, reactor systems, and fuel recycling.

Hosting the Innovation Campus would position South Carolina to lead the domestic nuclear industry through innovation and commercialization, driving private-sector investment, job creation, and performance-based capital deployment. This would also address energy dominance, grid reliability, national security and defense infrastructure, secure fuel supply chains, and advanced manufacturing competitiveness.

Vision and objectives: South Carolina’s approach will establish an integrated, full-lifecycle nuclear ecosystem that builds on the State’s existing fuel cycle foundation while enabling targeted expansion. This model advances three coordinated pillars aligned with DOE’s lifecycle framework to accelerate nuclear deployment, strengthen advanced manufacturing, and scale next-generation innovation. See Figure 2 for an overview of South Carolina’s Innovation Campus vision. The specific RFI functions addressed via each pillar can be found in the DOE Request for Information on Establishment of Nuclear Lifecycle Innovation Campuses, Section II.1 to II.17.



Pillar I - Innovate the backend fuel cycle: Strengthen South Carolina’s position to help close a critical national bottleneck in waste management, reprocessing innovation, and long-term fuel security while using AI-enabled systems to modernize nuclear cleanup and material stewardship.

- Potential activities include: Scalable, proliferation-resistant reprocessing R&D; modernization of waste treatment assets; AI-enabled cleanup and monitoring systems, reprocessing of existing in-state surplus nuclear material (should additional domestic intake not be feasible); coordinated expansion of fuel fabrication and enrichment capabilities to strengthen domestic fuel security
- RFI functions directly addressed: 1 (Nuclear fuel reprocessing or recycling), 2 (Disposition of waste), 3 (Fuel fabrication), 5 (Enrichment), 7 (Data center construction and operations), 10 (Isotope production), and 17 (Decommissioning and site remediation)

Pillar II - Lead secure nuclear reactors & systems: Position South Carolina as the leader in secure nuclear systems by building reactors with AI-enabled cyber defense, advanced threat simulation, and grid resilience.

- Potential activities include: AI-enabled cybersecurity platforms, advanced threat simulation and digital twin modeling, next-generation safeguards integration, and a nuclear-focused cyber and proliferation testbed in partnership with SRNL and federal agencies. These capabilities will also support engaging private companies to manufacture new and innovative reactor designs at scale, leveraging South Carolina's world-class advanced manufacturing base as a strategic advantage.
- RFI functions directly addressed: 8 (Advanced reactor deployment), 12 (Proliferation resistance), and 14 (Safety)

Pillar III - Deliver national security-aligned infrastructure: Design a layered infrastructure model, integrating grid-connected SMRs, critical-need MMRs, and secure microgrids to support energy dominance, while leveraging South Carolina's strong advanced manufacturing foundation to engage private industry and enable the scaled production of innovative reactor designs.

- Potential activities include: Phased deployment of SMRs and mission-specific microreactors; secure nuclear-powered data center and microgrid development; establishment of a microreactor hub for staging, training and lifecycle support of modular systems; targeted transmission upgrades; and structured public-private partnerships to support scalable infrastructure buildout
- RFI functions directly addressed: 7 (Data center construction and operations), 8 (Advanced reactor deployment), 12 (Proliferation resistance), and 14 (Safety)

Workforce development (#13), safety (#14), environmental stewardship (#15), and secure transportation networks (#16) are all cross-cutting, enabling functions that will be

leveraged to stand up the Innovation Campus. Additionally, South Carolina proposes two new cross-cutting functions of resilient supply chain and cyberoperations.

Additional RFI functions may be addressed via the expansion of South Carolina's existing asset base today, from Innovation Campus development or via adjacent activities. For more detail, refer to Table 1.

Table 1: RFI functions to be addressed via expansion of existing assets from NLIC development or adjacent activities

RFI Functions	Description
3 - Fuel fabrication for fresh and reprocessed material	Supported at Westinghouse Columbia Fuel Fabrication Facility (CFFF), currently expanding to support highly enriched materials
4 - Conversion for fresh and reprocessed material	Potential addition for consideration following H Canyon restart project
5 - Enrichment and downblending for fresh and reprocessed Uranium and Plutonium	Supported by H Canyon restart project
6 - Deconversion for fresh and reprocessed material	Potential addition for consideration following H Canyon restart project
9 – Uranium mining and milling	SRNL exploring entry points into uranium, thorium, and rare earth mineral extraction as a byproduct of existing mining operations located across the State
11 – Advanced manufacturing and other support industries	Supported by the SRNL Advanced Manufacturing Collaborative (AMC)

Target outcomes: Over time, this integrated model has the potential to support ~2-5 gigawatts (GW) of incremental nuclear capacity, attract \$60B or more in private capital investment, generate ~40K construction and ~15K direct jobs at maturity (doubling the existing statewide nuclear-related workforce of ~16K), and reestablish durable domestic industrial capacity across advanced manufacturing, defense, shipbuilding, medical innovation, and other core industries.

To sustain long-term growth, South Carolina will expand existing nuclear-related training, apprenticeships, academic degrees, and K–12 science, technology, engineering, and mathematics (STEM) initiatives, including the Battelle Savannah River Alliance (BSRA) Catalyst Grants and the Governor's School for Science and Mathematics (GSSM), an SC NEXUS Education and Workforce Center (EWC) initiative serving more than ~10K students.

By the end of 2027, South Carolina aims to meet foundational Innovation Campus milestones including workforce expansion, backend fuel cycle licensing actions underway, expansion of backend fuel capabilities at H Canyon by SRS (building restart effort), launch

of a nuclear AI and cybersecurity initiative by the State, SRNL, and other collaborators; and initial Phase I infrastructure groundbreaking, executed in coordination with DOE and private partners. To support this timeline, South Carolina will explore defining an office to oversee coordination, execution, and governance of Innovation Campus development. The State has demonstrated its ability to stand up mission-focused entities, such as SC NEXUS in support of South Carolina's tech hub designation, to align stakeholders and drive complex, cross-sector initiatives forward.

Proposed state participation: South Carolina intends to contribute the following to enable successful deployment of the Innovation Campus:

- Permitting coordination: Accelerate state-level permitting and regulatory alignment to streamline site development.
- Workforce expansion: Scale nuclear engineering, skilled trades, apprenticeships, and K-12 STEM pipelines aligned with advanced reactor and fuel cycle needs.
- Infrastructure readiness: Align transmission, secure transport corridors, and site investments to support phased nuclear capacity.
- Economic incentives: Deploy performance-based tools to catalyze private capital and advanced manufacturing growth.
- Integrated governance: State-led coordination of industry, academic, and federal partners.
- R1 and R2 commercialization and R&D capabilities: Activate university assets and partnerships to progress applied research and translate lab-scale breakthroughs into commercial solutions.

Proposed federal participation: Implementation of the Innovation Campus would be structured through coordinated federal-state alignment across capital planning, permitting, and oversight, with private capital leading major investments.

Federal participation would be focused on targeted, time-bound de-risking mechanisms consistent with statutory authority. These may include:

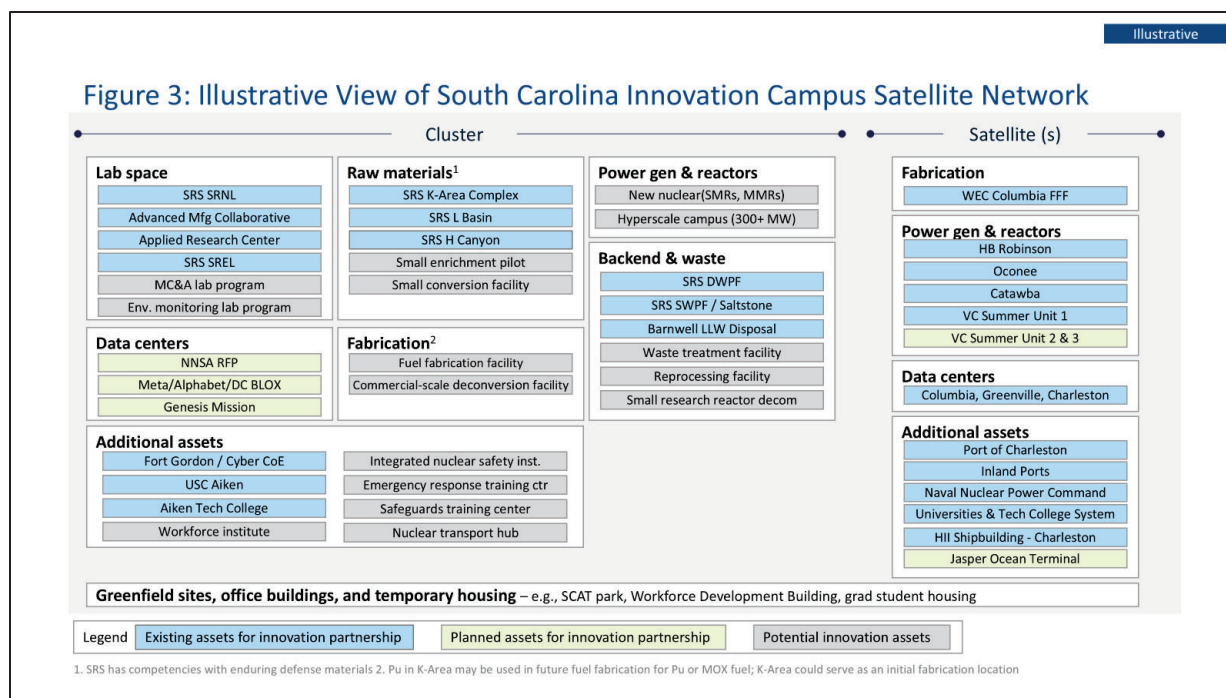
- Land access: Structured lease model of federally controlled land at SRS to host the private sector facilities and activities corresponding to the Innovation Campus and proposed movement of the fence line to incorporate additional land into the public domain.
- Time-bound derisking mechanisms: Selective cost-sharing for first-of-a-kind activities or access to DOE financing guarantees to reduce cost of capital.

- Regulatory and legislative partnership: Coordinated regulatory streamlining and federal leadership on required statutory, legislative, and funding framework updates (e.g., appropriate flexibility in use of Nuclear Waste Policy Act (NWPA) funds) to enable integrated lifecycle activities.
- Interagency alignment: National security-related functions are likely to require collaboration across agencies such as DOE and the Department of War (DOW).
- Infrastructure needs: Further definition of water, transportation, grid, and community infrastructure improvements required to enable Innovation Campus deployment and long-term operations.

Any DOE–Host State Agreement would clearly define roles, responsibilities, and long-term financial obligations, including decommissioning and stewardship, in a fiscally disciplined, performance-based manner that protects federal taxpayers. South Carolina has additional perspectives on how this operating model and governance could be allocated between parties and is open to discussing and refining this model in coordination with DOE and other related federal entities.

2. Proposed Sites Within the State

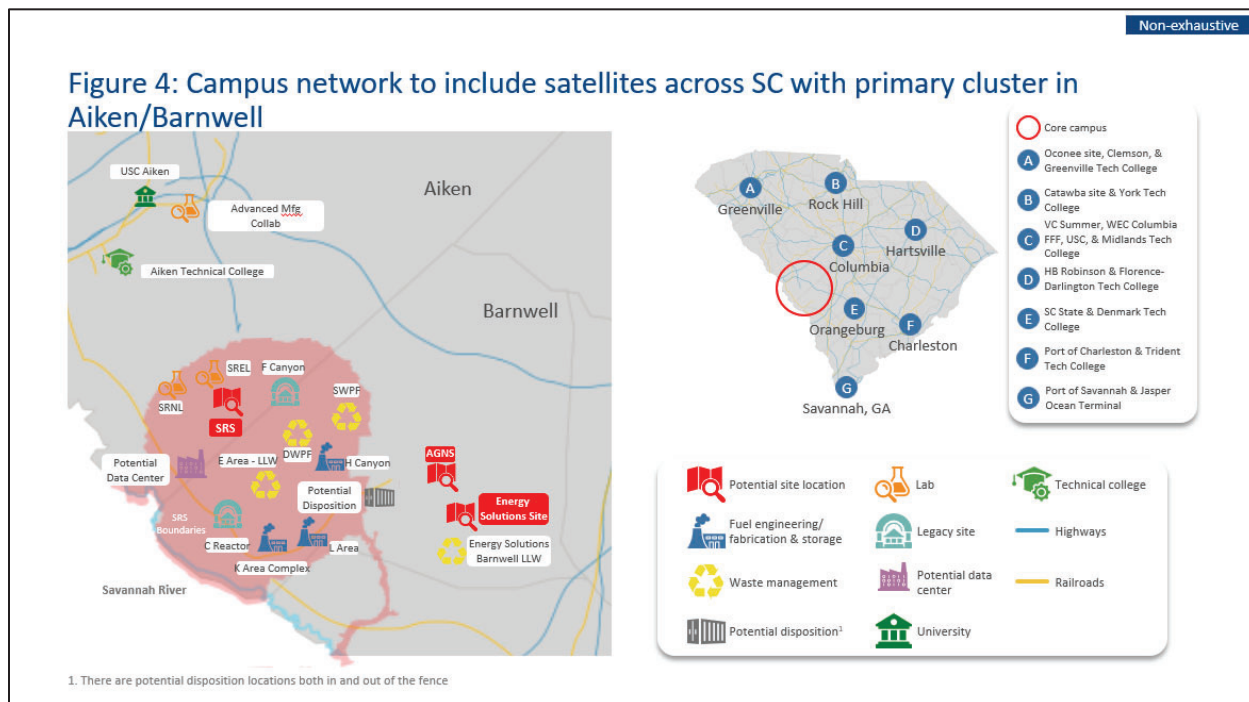
South Carolina is bringing forward a Nuclear Campus Satellite Network, an integrated and mission-driven framework designed to capitalize on the deep, site-specific expertise around established nuclear zones while enabling workforce mobility, collaboration, and scalability statewide. The core of physical assets will continue to be clustered in the Aiken–Barnwell region surrounding SRNL and SRS. This area includes secure nuclear facilities, buffer zones, controlled access, established utilities, transportation access, and existing siting envelopes suitable for enrichment, reprocessing, advanced reactor deployment (including microreactors), AI-enabled infrastructure, and related fuel cycle activities. These are connected to a satellite network of research universities, utilities, workforce institutions, advanced manufacturers, and logistics infrastructure spanning the nuclear value chain. See Figure 3 for an illustrative view of the proposed Innovation Campus network.



To meet national nuclear goals and for national security purposes, we believe the best solution is to use DOE property for at least a portion of the Innovation Campus. In our region, the best fit location would be an agreement for land lease at Savannah River Site including but not limited to sites included in the data center RFP. SRS is the State's preferred anchor location given its existing licensed nuclear infrastructure and decades of federal-state regulatory integration. However, South Carolina is intentionally advancing a site-optional strategy to provide DOE with flexibility in phasing, mission alignment, ownership structure, and regulatory posture. The State anticipates any site in the Aiken-Barnwell region to have broadly similar geologic and hydrogeologic characteristics to those documented at SRS, given the shared regional stratigraphy and Coastal Plain formations. Use of sites outside of federally owned land would be contingent upon DOE authorization, federal permitting, and satisfaction of all applicable regulatory requirements.

Recent successful commercial uses of SRS property, such as the Ameresco Biomass Cogeneration Facility and the Three Rivers Landfill, demonstrate the viability of structured public-private deployment models on or near DOE land. Outside of SRS but within the Aiken-Barnwell region, there are several additional sites that have been identified for proposed campus components including but not limited to the AGNS site, which has industrial infrastructure suitable for fuel cycle-related activities, and the EnergySolutions Barnwell site, which provides proximity to an operationally licensed disposal footprint that could support integrated waste management functions. South Carolina has also identified potential Innovation Campus Headquarters locations in and around the Aiken area such as

the Workforce Development Building. Additionally, sites such as the planned SCAT Park in Barnwell County provide space to further expand the local ecosystem, including accommodating supply chain partners seeking to locate near the Innovation Campus. See Figure 4 for a geographic view of physical assets and potential site locations.



Site Screening and Suitability Criteria: Candidate sites will be screened using defined criteria aligned with DOE and Nuclear Regulatory Commission (NRC) requirements, including:

- **Energy availability:** High-reliability baseload power, transmission capacity, and grid resilience sufficient for enrichment, separations, and AI/data infrastructure.
- **Water resources:** Sustainable withdrawal capacity, cooling capability, and discharge compliance pathways.
- **Transportation access:** Direct or proximate rail connectivity, interstate highway access, and port or river logistics options.
- **Buffer zones and security:** Adequate stand-off distances, controlled perimeters, compatibility with safeguards, and physical protection requirements.
- **Waste management pathways:** Proximity to treatment, interim storage, and licensed disposal facilities.
- **Environmental and regulatory readiness:** Compatibility with existing permits, land-use controls, cleanup milestones, and institutional controls.

- **Geologic suitability:** Favorable subsurface conditions, seismic stability, soil and foundation characteristics to support reactor siting, fuel cycle facilities, and waste management activities.
- **Reuse constraints, zoning considerations, and modernization requirements:** Surface any constraints and inform early risk identification and mitigation strategies.

Through advance screening, early coordination with DOE and NNSA, and integration of existing nuclear zones with statewide assets, the South Carolina Nuclear Campus Network enables rapid stand-up of an Innovation Campus while ensuring regulatory clarity, security integrity, and long-term mission sustainability.

3. Potential Private Sector Partners

South Carolina can build the Innovation Campus on top of an existing, scaled private sector nuclear ecosystem. The State is home to more than 300 advanced energy players and over 50 direct nuclear participants, contributing to a nuclear industry that directly employs more than 16,000 people and generates over \$11B in total economic output. This established base provides an immediate foundation for private capital mobilization, co-location of facilities, and accelerated deployment of integrated nuclear capabilities.

To operationalize the Innovation Campus, South Carolina will explore defining an office to oversee collaboration with three primary categories of private sector partners.

1. **Technology & research companies:** Companies that pilot emerging technologies, co-locate facilities and share critical infrastructure, and partner with national labs and research institutions on applied R&D to translate innovation into commercialization. Spanning the nuclear value chain, these companies form the operational backbone of the Innovation Campus, benefiting from an integrated platform designed to reduce cost and accelerate deployment.
2. **Enablers – Siting, development, workforce, and investment:** Partners providing key enabling functions for nuclear deployment, including land, site control support, development expertise, workforce training, or capital.
3. **Offtakers:** Utilities, AI data center operators, or hyperscalers that execute long-term offtake agreements such as Power Purchase Agreements (PPAs), anchor demand, secure predictable revenue streams, and reduce financing risk.

South Carolina benefits from an established commercialization bridge between research and industry to leverage the capabilities of these partners. SRNL maintains active industry engagement through existing joint research agreements with various firms that have directly or through cost share provided initial applied R&D contributions. Other organizations such as SC NEXUS, the South Carolina Research Authority (SCRA), and

SRNL's AMC also support innovation and commercialization efforts through their Entrepreneurship and Innovation Exchange (eiX), an initiative providing training, resources, and capital to startups in the energy sector.

To date, the State has met with 43 private sector players who have expressed interest in aspects of the lifecycle campus model and siting in South Carolina. Their capabilities span all 17 potential Innovation Campus functions, including players with a focus on disposition and a subset that have expressed interest in siting. *(See Letters of Support Addendum for additional detail from companies that have formally expressed interest.)*

South Carolina intends to work collaboratively with key stakeholders to formalize its partner selection and engagement approach, in line with federal guidance and priorities. The process will apply defined evaluation criteria to assess alignment with the State's strategic objectives, commercial viability and risk allocation, execution capability, and long-term sustainability, and will culminate in the selection and formalization of priority partners under an appropriate implementation framework.

This down-selection process will be executed in close coordination with Commerce, local economic development, and the DOE and other federal stakeholders, where applicable, to ensure alignment with national priorities and potential federal participation.

4. Site Infrastructure Requirements

South Carolina can provide and support the full range of infrastructure required to enable all Innovation Campus functions, building on a mature nuclear ecosystem anchored by existing federal and commercial operations.

Power: The proposed sites are supported by robust utility systems capable of sustaining fuel cycle operations, advanced manufacturing, AI data centers, and other energy-intensive activities. SRS currently has a 20 MW DOE-owned biomass combined cycle plant that produces between 70 GWh and 95 GWh annually. Two solar power generation facilities that would produce around 125 GWh annually each are in development to be operational in late 2029. Ongoing upgrades in Aiken County include enhancements to electric utility infrastructure to further strengthen grid reliability and accommodate rising demand. South Carolina is currently supported by over 6 GW of nuclear energy from seven reactors across four power plants which is expected to increase to more than 8 GW after completion of reactors 2 and 3 at V.C. Summer. Transmission capacity in the Aiken and Barnwell region will be evaluated and updated as required in coordination with the outstanding SRS data center RFP. Dominion's 2025 Integrated Resource Plan (IRP) already reflects ongoing investments in the western service territory, including the completed Stevens Creek–Hooks

115kV rebuild to increase load flows from the North Augusta area and broader transmission planning tied to large generation additions and interconnection studies.

Water: Water availability is a core regional strength and is one of the reasons SRS is located across Aiken – Barnwell region (which also incorporates portions of Allendale County). Existing raw and treated water systems currently support major industrial and nuclear operations. The Savannah River is a crucial water source and provides water transportation access. The operational pumphouse at SRS has two 7,500 Gallons per Minute (GPM) pumps and four 32,000 GPM pumps available connected across the site with 43 miles of underground piping. SRS has an existing permit with the South Carolina Department of Environmental Services (SCDES) that allows the withdrawal of approximately 250,000 GPM provided that 95 percent of water removed from the river is returned. Currently, SRS only withdraws ~7,500 GPM (3 percent of that allotted capacity. These resources position the site to support reactor cooling, fuel processing, and other water-dependent activities.

Waste Management: South Carolina has demonstrated capability in surplus nuclear materials management, storage, and disposition. This includes decades of processing experience at H Canyon which provides proven capability for uranium recovery, material downblending, and volume reduction prior to disposition. The State supports integrated approaches to low-level waste management through existing disposal pathways and established regulatory frameworks used at the existing Defense and Salt Waste Processing Facilities (DWPF and SWPF), the Saltstone facility, Glass Waste Storage Buildings (GWSBs), and Barnwell Complex operated by EnergySolutions. On-site interim storage, waste characterization, packaging, and transport capabilities can be scaled as Innovation Campus activities expand. *(See Question 10 for additional detail on waste management.)*

Transportation: Secure transportation corridors are a longstanding regional strength. The site is supported by an extensive network of interstates, rail, river, deepwater port, and inland port infrastructure capable of handling nuclear materials. These routes connect the site to key nuclear assets near Columbia, Charleston, and Greenville. Existing secure transport protocols and coordination with federal and state agencies allows for movement of surplus nuclear materials and additional materials including uranium hexafluoride (UF₆), isotopes, and high-level waste. This provides a strong foundation for the handling of sensitive materials. *(See Question 13 for additional details on transportation capabilities.)*

Cybersecurity: Cybersecurity systems are integral to the region's nuclear operations. South Carolina is expanding capacity through initiatives such as the Cyber Integration Center being developed in partnership between USC Aiken and the South Carolina National Guard, the Grid Enabled Cyber Operations (GECO) Range project, led by SRNL to

establish a cyber testing range for grid connected equipment, and the US Army Cyber Center of Excellence at Fort Gordon, also in partnership with SRNL. The South Carolina National Guard operates one of only five cyber battalions in the United States that focuses on protection of national security systems and infrastructure from cyber threats. SRNL is building a robust cybersecurity-focused testbed in coordination with SC NEXUS in addition to hosting the Cyber Threat Working Group (CTWG) for all SRS organizations and National Security Agency (NSA) - Georgia's Cybersecurity Directorate Team. At SRS, security is a high priority and facilities that house and manage nuclear materials follow the International Atomic Energy Agency (IAEA) Additional Protocol and International Safeguards. In addition, the SCRA developed the Center for Cybersecurity in 2024 that will drive implementation of the South Carolina cybersecurity plan.

5. Regulatory Framework and Licensing Support

South Carolina will approach regulatory oversight of the Innovation Campus through a coordinated, risk-informed framework that aligns state authorities with DOE, NRC, and the National Environmental Policy Act (NEPA) jurisdiction building on decades of partnership at SRS and through the Federal Facility Agreement (FFA). South Carolina brings a clear perspective on how regulatory roles can be structured to maximize efficiency while maintaining safety and environmental protection and will proactively coordinate with the federal government to align roles, responsibilities, and decision authority among DOE, NRC, and South Carolina as an NRC Agreement State. The FFA Core Team is a proven model to integrate two regulatory frameworks and streamline the regulatory process, reducing duplication and redundancies. South Carolina would exercise its delegated authorities under the Resource Conservation and Recovery Act (RCRA) and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) to directly manage applicable activities at the state level, streamlining permitting timelines while ensuring full compliance. Additional permitting would use existing partnerships with DOE to expedite the required processes, similar to the work accomplished by project teams in place for the Savannah River Plutonium Processing Facility (SRPPF) mission at SRS. South Carolina recognizes DOE's ultimate safety authority for DOE-owned facilities and will align its oversight accordingly, avoiding duplicative regulatory structures.

SRNL's Regulatory Center of Excellence (RCE), established by DOE in June 2022 and staffed by SRNL experts alongside former DOE and SCDES regulatory leaders, academic partners, and specialized small businesses, would support efficient, defensible execution. The RCE provides expertise in licensing strategy, safety basis development, regulatory communications, and public engagement, and can leverage broader national laboratory resources as needed. The RCE has provided support to the Office of Nuclear Energy in their

previous efforts in collaborative-based siting regulatory communications. The RCE provided information related to regulatory engagement and best practices for facility siting and operations learned from previous siting and operation efforts.

Additionally, South Carolina is an Agreement State through the NRC which gives the State authority to license and inspect byproduct, source, or special nuclear materials used or possessed within their borders. This capability positions South Carolina to facilitate accelerated, transparent, and mission-aligned regulatory approvals for Innovation Campus activities. Recent federal actions further support accelerated deployment. DOE's expanded use of NEPA categorical exclusions for advanced nuclear reactors and the DOE Reactor Pilot Program, allowing DOE approvals in lieu of NRC licensing in certain cases, demonstrate a pathway for approvals measured in months rather than years.

Regulatory streamlining would be achieved through early and continuous regulator engagement, coordinated reviews, and use of established SRS precedents to avoid duplicative or sequential approvals. South Carolina's 2025 Energy Security Act (ESA) further enhances permitting efficiency by establishing clearer review timelines and improving interagency coordination, reducing project risk while preserving rigorous oversight.

SCDES has an established energy team that is assigned to work on new energy projects in the State to ensure that the 6-month ESA permitting requirement is met. SCDES would employ a collaborative approach for navigating the permitting and licensing process similar to the current setup with the EnergySolutions Low Level Waste (LLW) disposal site. The 2025–2026 South Carolina budget allocated \$14.5M to SCDES to support the permitting process and a portion of that has been used to integrate AI to speed up processing times.

6. Legislative and Policy Requirements

South Carolina's existing statutory and regulatory framework is broadly supportive of nuclear energy development. The State has a long-standing history of hosting complex nuclear operations and has recently taken additional legislative action to streamline energy infrastructure development. Most notably, the South Carolina Energy Security Act (ESA) (May 2025) establishes a more efficient pathway for advanced nuclear and related energy projects by directing state agencies to expedite permitting and infrastructure decisions. Additionally, the Governor's Nuclear Advisory Council (GNAC) has been directed to support statewide strategic planning for nuclear generation and waste management. On workforce development, South Carolina has deployed ~\$95M towards statewide workforce funding for programs via the SC Workforce and Industry Needs Scholarship (WINS) within the SC Technical College System (~\$3M deployed toward energy sectors and ~\$7.5M toward

construction programs in the last 2 academic years), and \$4.4M of federal funds via the EWC within SC NEXUS, which is specific to energy sector careers.

South Carolina is prepared to evaluate and, where appropriate, pursue statutory or regulatory adjustments in coordination with corresponding federal action, provided such refinements remain consistent with environmental protection, public safety, and long-term stewardship responsibilities. The State is prepared to align its framework with evolving federal reforms (e.g., NRC modernization efforts, NEPA streamlining initiatives), recognizing that effective and durable reform must originate at the federal level. As federal agencies update guidance and processes pursuant to recent Executive Orders, South Carolina stands ready to move in concert, ensuring that state-level statutes, permitting timelines, and administrative procedures remain synchronized. Where clarification of authority, removal of duplication, or alignment of review timelines would support efficient deployment, South Carolina will work alongside DOE and relevant federal agencies to ensure coordinated implementation. For example, certain state-level permitting requirements related to the storage, transport and disposal of spent fuel, or provisions affecting cost recovery for energy infrastructure, may warrant review to ensure consistency with potential Innovation Campus functions.

At the state level, South Carolina will leverage SRNL's RCE to support early identification of required approvals, sequencing of federal and state reviews, and development of defensible licensing strategies. The RCE brings prior DOE and state regulatory leadership experience and can help align Innovation Campus activities with established SRS precedents to reduce duplication and compress review timelines.

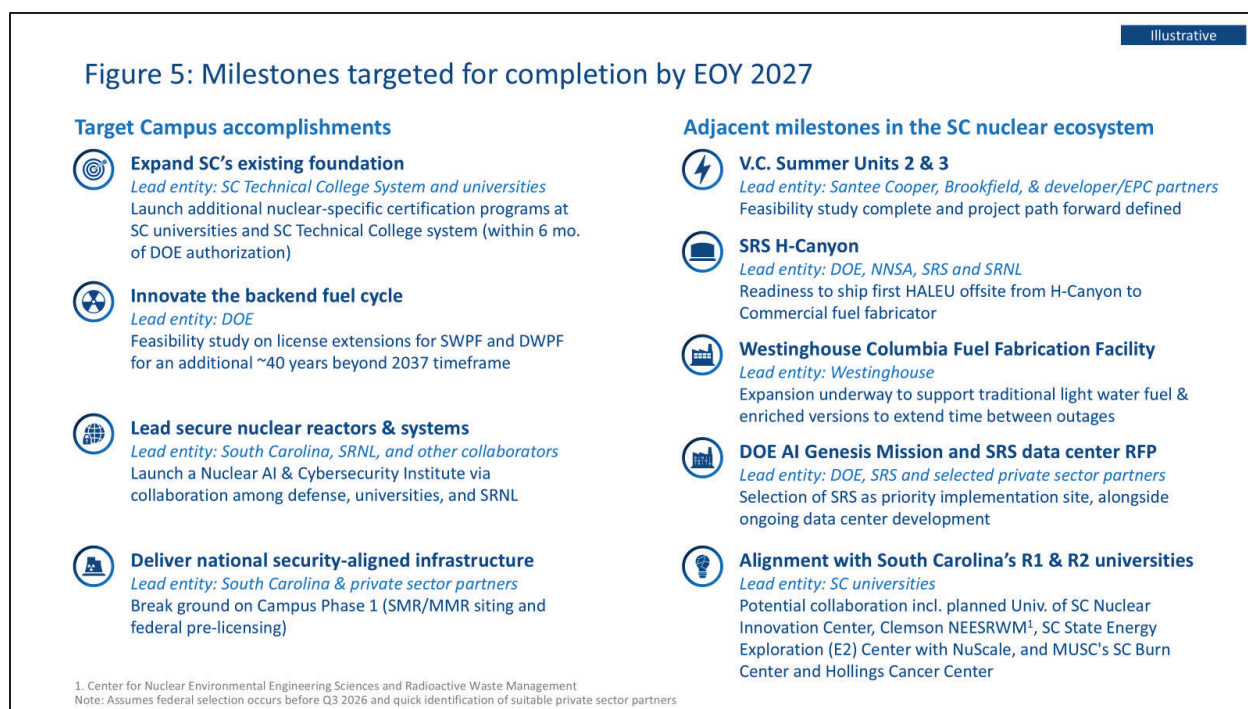
At the federal level, continued progress in streamlining licensing and permitting processes aligns with recent Executive Orders and will be important to meeting DOE's 2027 deployment timeline. Coordination between DOE authorities, NRC processes, and state-level permitting will be essential, particularly for sensitive functions such as reprocessing, enrichment-related activities, and advanced reactor demonstration.

With respect to timing, the South Carolina General Assembly convenes annually, with the regular legislative session typically running from January through May. Should targeted statutory adjustments be identified in coordination with DOE in 2026, legislation could be advanced during the 2027 regular session. With support from agencies such as SRNL's RCE, implementation could occur later that calendar year to meet DOE's 2027 deployment timeline.

7. Timeline for State Support

South Carolina recognizes DOE's 2027 timeframe for initial deployment of Innovation Campus activities and is prepared to move expeditiously in coordination with federal partners. The State's ability to support an accelerated timeline is grounded in its existing nuclear-licensed sites and operating institutions, experienced regulatory agencies, and longstanding federal relationships at SRS, SRNL, and the four operational reactor sites around the State (including V.C. Summer). The State also has experience bringing together coordinated stakeholder groups to drive programs such as SC NEXUS and SRNL's AMC, and for the purposes of this Innovation Campus, would bring together the Department of Commerce, SC NEXUS, and SRS Community Reuse Organization (SRSCRO), among others. To support this timeline, South Carolina will explore defining an office to oversee coordination, execution, and governance of Innovation Campus development. Realizing this timeline also depends on active federal partnership and timely planning with DOE and related agencies.

Figure 5 outlines foundational milestones targeted by the end of 2027, focused on workforce activation, backend fuel cycle continuity, cybersecurity capabilities, and initial site and reactor siting actions. These steps establish regulatory, workforce, and infrastructure readiness.



From this foundation, subsequent phases scale to advanced reactor deployment, expanded fuel cycle functions, and co-located industrial and AI data center development.

Over time, this sequenced approach is intended to enable multi-gigawatt capacity, substantial private capital investment, and long-term workforce growth consistent with the Innovation Campus target outcomes described in this response.

Site selection and infrastructure upgrades: South Carolina benefits from existing transmission corridors, secure perimeters, and established emergency planning zones (EPZs), and a desired site of available federal land at SRS. Where incremental infrastructure upgrades are required (e.g., grid interconnection enhancements, transportation corridor reinforcement, or water system expansion), planning will be owned by SCDES and the South Carolina Department of Transportation (SCDOT) and coordinated concurrently with regulatory review to minimize sequencing delays.

Federal permit reviews and approvals: South Carolina anticipates that DOE compliance, NEPA review, NRC licensing and related federal approvals for activities such as advanced reactor deployment, enrichment-related operations, reprocessing, and waste management can be sequenced efficiently via early federal coordination and concurrent review processes between DOE, NRC, Environmental Protection Agency (EPA) and others.

State permit reviews and approvals: South Carolina's ESA provides a framework for expedited review of energy infrastructure projects. Existing state agencies responsible for environmental review, siting, water resources, transportation coordination, and energy alignment (e.g., SCDES, ORS) may therefore conduct accelerated permitting and infrastructure approvals, subject to the scope of anticipated innovation Campus functions. The SCDES Energy team works with proposed ESA facilities to develop mutually agreeable integrated permitting / licensing timelines.

Workforce training program launches: South Carolina's university and technical college partners have indicated that new or expanded nuclear-relevant programs can be operational within ~six months of formal authorization from the DOE, supported by existing structured progression and guaranteed transfer pathways from high-school to technical colleges and universities.

Community engagement initiatives: South Carolina has already engaged with leadership in Barnwell, Aiken, and Allendale Counties regarding nuclear-related development opportunities and continues to coordinate with regional stakeholders via organizations such as local economic development groups, SRSCRO, the Department of Commerce, and SC NEXUS. Maintaining structured engagement, including county briefings, supports timely alignment and durable community support. *(See Questions 8 and 9 for additional detail on stakeholder engagement.)*

Key schedule risks and mitigation: South Carolina recognizes two primary schedule risks in meeting the 2027 timeframe:

- **Federal regulatory review duration (NEPA, NRC, related approvals):** Certain advanced fuel cycle or reactor activities may require additional federal review. To mitigate this risk, the State can engage in early pre-application coordination with DOE and relevant agencies (e.g., NRC, EPA), support concurrent review processes where permissible, and advance site preparation, workforce mobilization, and enabling infrastructure in parallel with federal reviews.
- **Enabling infrastructure synchronization (grid and transmission upgrades):** Large-scale deployment may require transmission upgrades with long equipment lead times. The State (via SCDES, SCDOT, and others) can initiate interconnection studies and transmission planning early and phase development so initial Innovation Campus functions (e.g., applied R&D, workforce, manufacturing testbeds) proceed while larger capacity expansions are sequenced.

This proactive sequencing is intended to preserve alignment with DOE's 2027 initial deployment objective while enabling long-term scale.

8. Anticipated Public and Stakeholder Concerns

South Carolina is not new to complex nuclear operations which require established regulatory, security, and environmental monitoring frameworks. SRS has supported downstream and sensitive nuclear activities since the 1950s, including nuclear waste processing, storage, and safeguards operations at the K-Area Complex and H Canyon.

Legacy concerns: Legacy incidents may continue to shape stakeholder dialogue in certain communities. In particular, the plutonium settlement agreement and broader discussion of surplus plutonium inventories may prompt questions regarding material volumes, processing timelines, and long-term stewardship commitments. The original V.C. Summer construction project on Units 2 & 3, during 2008–2017, also encountered difficulties which required rebuilding public confidence. These experiences underscore the importance of clear contractual governance, disciplined project management, and consistent public communication.

Forward-looking concerns: Certain Innovation Campus functions, particularly advanced fuel cycle activities such as reprocessing, may prompt stakeholder questions related to material safeguards, environmental monitoring, and long-term accountability. In addition, concurrent federal and commercial investment may raise questions related to housing, traffic, and infrastructure strain in the Aiken–Barnwell region.

Mitigation strategies: Recent public opinion data reflects a constructive environment for continued nuclear development. A recent South Carolina Policy Council poll suggests 58 percent of voters support expanding nuclear energy in the State. Additionally, the State views sustained transparency, data-driven communication, and early engagement as foundational elements of Innovation Campus implementation and is home to multiple community- and industry-based organizations that drive consistent public communications. These groups include Citizens for Nuclear Technology Awareness (CNTA), a longstanding organization that provides public education and advocacy related to nuclear technology and national security missions to contribute to informed community dialogue, and the Palmetto Nuclear Coalition (PNC) which hosted, in collaboration with the University of South Carolina, the 2nd Annual South Carolina Nuclear Summit in December 2025 with over 400 attendees.

Local elected officials and regional development leaders in Aiken, Barnwell and Allendale Counties have demonstrated sustained engagement in nuclear-related economic planning and will continue to play a central role in community dialogue. To reinforce public confidence, South Carolina anticipates establishing structured engagement mechanisms, such as public relations support, transparent environmental and materials monitoring dashboards, and recurring regional briefings. The State will respond to organized opposition or misinformation through established public forums and verified technical data, maintaining a fact-based and consistent communication posture. *(See Question 9 for additional detail on stakeholder engagement.)*

9. Stakeholder Engagement Strategy and Cooperation Mechanisms

A coordinated, locally anchored stakeholder engagement strategy ensures early transparency, sustained dialogue, and durable public alignment throughout development and operation of an Innovation Campus. The potential office proposed in Question 1 could also support enabling activities such as community engagement and public awareness efforts, with structured participation from local economic development organizations, SRSCRO, and county and municipal leadership to ensure alignment and transparency. Leveraging experience in coordinated multi-stakeholder efforts for SC NEXUS and SRS's AMC, engagement would bring together the South Carolina Department of Commerce, SC NEXUS, SRSCRO, and regional partners in Western South Carolina, with structured participation from county and municipal leadership. Engagement will evolve across project phases: beginning with early site evaluation and awareness-building, expanding through construction planning and infrastructure coordination, and transitioning to long-term operational transparency and community benefit alignment.

Local stakeholder engagement: Local government engagement will serve as the foundation of the State's approach. Mayors, county councils, and county administrators will function as primary conduits for community dialogue and information exchange. Aiken, Barnwell, and Allendale Counties are members of the Energy Communities Alliance (ECA), which convenes local government officials to align on policy positions and economic development strategies related to nuclear and advanced energy activities, and have already been engaged through SC NEXUS. In 2025, Barnwell County Council adopted a formal resolution supporting the SRPPF mission at SRS, with meeting records reflecting no public opposition during that session. Aiken County Council has similarly passed resolutions supporting expanded defense-related nuclear missions at SRS and urging continued federal funding. These formal actions demonstrate institutional endorsement at the county level and provide a stable governance framework for continued engagement as Innovation Campus planning advances.

Alignment with target rural communities: Barnwell and Allendale Counties were previously identified as targeted rural communities for advancing SC NEXUS initiatives, and engagement mechanisms are already in place through workforce development planning, infrastructure assessments, and economic diversification discussions. Regional planning materials in Aiken County incorporate projected nuclear-related growth, including SRPPF operations and associated employment, into broader economic assumptions, reflecting that nuclear expansion is embedded within local development strategy. In addition, Aiken-based CNTA maintains sustained public programming and advocacy related to new SRS missions. These documented planning actions and civic structures reflect durable rural and regional alignment that can be built upon as Innovation Campus discussions progress.

Engagement of Tribal nations: There are no federally recognized Tribal nations within 50 miles of SRS. Direct consultation with Tribal nations can be initiated in accordance with federal and state protocols. South Carolina can engage with any Tribal entities with interests potentially affected by Campus activities.

STEM education and career readiness: South Carolina will prioritize early, sustained engagement with K-12 students and educators to strengthen statewide nuclear and advanced energy career awareness. The State already has a strong K-12 STEM foundation, supported by programs like the BSRA Catalyst Grants supporting STEM education, SRSCRO scholarships, educational resources, and college training programs, and the GSSM, an SC NEXUS EWC initiative and the top-ranked high school in South Carolina serving more than 10,000 students. Through GSSM’s statewide Outreach Center and “STEM Days” programming, hands-on instruction is delivered directly into school districts across South Carolina, and its GoSciTech summer programs provide immersive laboratory-based STEM experiences for middle and high school students, including in rural communities.

Going forward, there is an opportunity to expand STEM enrichment, curriculum integration, teacher partnerships, and career exploration programs to ensure K-12 students, particularly in rural and historically underrepresented communities, are exposed to high-demand nuclear and advanced manufacturing pathways. Utility and energy partners reinforce this effort through initiatives such as Santee Cooper’s Energy Educators Institute, which provides multi-week training for K-12 teachers on energy systems and grid operations, equipping educators to integrate energy-focused STEM content into classrooms statewide. In addition, S²TEM Centers SC, managed through the SC Coalition for Mathematics & Science (SCCMS), supports professional development for PreK-12 educators to strengthen STEM instruction quality and alignment with workforce needs.

Collaboration with environmental stewardship groups: South Carolina recognizes a need to engage environmental stakeholders proactively and transparently on topics such as environmental safeguards, radiological monitoring systems, waste handling protocols, and compliance with federal and state regulatory frameworks, using structured forums including public briefings and environmental advisory panels with organizations including CNTA, the SRS Citizen’s Advisory Board (CAB) and the PNC, which held listening sessions across the State with the business community and Santee Cooper following the Brookfield – V.C. Summer announcement. The State may also maintain dialogue with local activist groups including SRS Watch and Savannah River Keeper on environmental stewardship topics such as safety and water quality impacts. Concerns raised through these channels may be addressed through verified technical data, public reporting mechanisms, and coordination with regulatory authorities to ensure fact-based communication.

Broader community engagement: In addition to elected officials and environmental stakeholders, the State will engage workforce development boards, technical colleges, universities, economic development organizations, and community-based organizations to ensure inclusive participation in Innovation Campus planning. Engagement will focus on

workforce pathways, infrastructure impacts, and equitable access to economic opportunity associated with potential Innovation Campus development. These partnerships reinforce alignment between community priorities and operational planning.

Measurable indicators of engagement success: The State will evaluate engagement effectiveness through value-oriented indicators focused on long-term alignment and durable support, including sustained or increased public confidence in nuclear development, growth in regional workforce program enrollment tied to Innovation Campus-related pathways, and continued participation of local governments and community organizations in structured planning efforts.

10. HLW Management, Treatment, Storage, and Disposal

Materials requiring long-term management would be handled through a layered, compliant approach that combines existing capabilities with purpose-built infrastructure and robust institutional controls. With established waste processing facilities, licensed disposal pathways, and decades of nuclear materials management experience at SRS, South Carolina has the infrastructure and institutional capacity to support federal efforts to address identified national gaps in back-end fuel cycle management, including waste disposition, reprocessing-related capabilities, and long-term fuel security.

SRS and Savannah River Mission Completion (SRMC) have decades of experience managing LLW, Mixed, Transuranic, and High-Level Waste, supported by SRNL which is the only National Lab stewarded by the DOE Office of Environmental Management (DOE-EM). SRNL has developed and supported radiochemical processing flowsheets for major DOE facilities including H Canyon, DWPF, and SWPF as well as for other sites across the DOE complex. H Canyon provides unique, end-to-end fuel cycle capabilities spanning receipt, chemical separation, downblending, and preparation of nuclear materials for storage or disposition. As the only operating large-scale, radiologically shielded nuclear chemical separations facility in the United States, H Canyon supports joint mission execution between DOE-EM and the NNSA, including surplus material disposition, nonproliferation objectives, and national security programs. Its demonstrated ability to process a wide range of materials has generated potential international interest in its technical model and capabilities as nations evaluate secure fuel cycle pathways. Existing operational and technical expertise would be applied through structured partnerships between SRNL and industry entities locating processing facilities at the Innovation Campus, ensuring mature, defensible treatment and disposition strategies.

SRS has been the subject of extensive geological and hydrogeological characterization over multiple decades, including comprehensive studies such as the SRS Geology /

Hydrogeology Environmental Information Document (WSRC-TR-95-0046), which provide a well-documented understanding of subsurface stratigraphy, confining units, and groundwater behavior. This depth of site characterization reduces subsurface uncertainty and provides a strong technical baseline for evaluating advanced disposal concepts such as boreholes.

Licensed nuclear assets and capabilities at SRS provide a strong operational foundation. H Canyon enables uranium recovery and volume reduction, minimizing material requiring direct disposal. L Basin is licensed to store both high- and low-enriched uranium used fuel and currently manages significant quantities of surplus nuclear materials in secure wet storage. The DWPF, the nation's only operating radioactive waste vitrification plant processing High Level Waste (HLW), converts high-activity liquid waste into a stable glass form suitable for long-term storage and eventual disposal. Interim safe storage of surplus nuclear materials is currently housed in two GWSBs at SRS with current plans to modify the vaults to increase capacity to ~8,600 canisters. If necessary, the GWSB's can further be modified to allow for a total storage capacity of ~9,200 canisters.

The Innovation Campus anticipates employing similar treatment, packaging, and interim storage approaches for commercial surplus nuclear materials, whether through life extension of existing licensed facilities or deployment of more modular treatment systems based on established technologies. While current vitrified waste storage capacity would not be sufficient for a fully scaled, long-term Innovation Campus, comparable storage designs can be replicated or expanded as required.

For South Carolina to be open to further discussions regarding long-term fuel management and disposal concepts, additional information and clarification from federal partners will be necessary. South Carolina is interested in exploring the potential role emerging technologies may play in the future of nuclear-fuel management, including concepts such as deep borehole disposal as a potential pathway for long-term isolation. For example, Savannah River National Laboratory could collaborate with other DOE national laboratories and technical experts to review prior borehole research and assess technical feasibility under South Carolina-specific geological conditions.

In addition, South Carolina would benefit from further clarification from the Department of Energy and other federal partners regarding several important implementation considerations. These include the following:

- anticipated quantity and form of used nuclear fuel a host state may be expected to manage;
- potential sources and transportation pathways for such material;

- the scope and scale of federal support that may be available, including technical assistance, capital investment, and community benefit frameworks; and
- what adjustments to existing federal statutes and regulatory structures, including the Nuclear Waste Policy Act of 1982, may be contemplated.

SCDES would oversee long-term institutional controls, records preservation, ongoing environmental and radiological cleanup and monitoring, and community engagement protocols to ensure accountability, transparency, and compliance. The existing tri-party SRS FFA between DOE, SCDES, and the EPA is an often-highlighted model in the DOE complex for achieving environmental cleanup through its efficient and effective Core Team process. As of the end of FY2024, 423 of 515 FFA waste units achieved cleanup completion (8) or were in the remediation phase (415). This high percentage of work completed and underway illustrates both the effective partnership the State has built with its federal partners and the technical expertise SCDES already has on staff to address environmental monitoring, cleanup, and community concerns. (*See Question 12 for additional detail on the environmental permitting and monitoring process.*)

11. State-Specific Limitations

South Carolina's long-standing operational history supporting complex nuclear missions at SRS, including materials processing, safeguards, environmental remediation, and waste management under federal oversight, provides institutional familiarity with full lifecycle nuclear activity.

Regulatory: While certain statutory refinements may be required to align with specific Innovation Campus functions, South Carolina maintains established permitting pathways for industrial, energy, and environmentally regulated facilities. State regulation generally does not prohibit activities such as advanced manufacturing, fuel cycle research, or enrichment-related operations. Where adjustments are needed, the State is prepared to pursue targeted updates in coordination with federal action. While state-level political leadership may change over time, there has historically been durable executive and legislative support for nuclear energy in South Carolina, limiting any policy volatility risk for long-term investments associated with the Innovation Campus.

Environment and geology: Certain Innovation Campus functions, particularly those involving waste management or advanced separations, would require detailed site-specific environmental review. However, no geologic or environmental conditions unique to South Carolina are currently known to preclude such development, and environmental monitoring and remediation frameworks are already operational under federal and state oversight. Multiple potential locations have been identified, and a comprehensive

environmental and regulatory siting assessment would confirm the selected site meets all applicable regulatory siting requirements.

Community and public perception: Community-based considerations represent the most nuanced area of potential limitation. Historical perceptions related to legacy incidents at SRS in earlier decades may influence stakeholder dialogue in certain regions. However, SRS now operates under rigorous federal oversight with established remediation, monitoring, and public reporting systems. The State is proactively engaging communities, emphasizing environmental safeguards and transparency, and incorporating structured consultation processes into planning discussions.

Supply chain: The United States relies on certain out-of-state or international vendors for select nuclear components and specialized services, reflective of broad structural gaps in the U.S. nuclear industrial base. However, South Carolina has a very robust nuclear supply chain relative to other U.S. states. The State is actively mitigating risk through partnerships that strengthen domestic supply chain resilience, leveraging its robust transportation infrastructure and regional logistics and supply chain networks. In addition, the SRS region anchors a dense nuclear cluster comprising companies across the nuclear lifecycle, providing a strong foundation to localize and expand critical elements of the supply chain.

Additional considerations include workforce scalability and transportation logistics for specialized nuclear materials. While South Carolina has a strong existing nuclear workforce base, further growth will be required to support complex Innovation Campus functions and anticipated private sector investment. These considerations are already being addressed as part of SC NEXUS's EWC, SRSCRO Workforce Opportunities in Regional Careers (WORC) grants, and partnership with the Technical College System and Department of Employment and Workforce. *(See Question 21 for additional detail and quantification on workforce development and urban planning, including housing expansion considerations.)*

Where limitations emerge, whether regulatory, logistical, or perception-based, the State intends to identify and address them at the outset in coordination with DOE and relevant stakeholders.

12. Environmental and Safety Stewardship

The State is well positioned to ensure long-term institutional controls, records preservation, ongoing environmental and radiological cleanup and monitoring, and community engagement protocols are met through its existing SRS FFA program, SRS RCRA permit, SRS Environmental Surveillance and Oversight Program (ESOP), and its involvement with the SRS CAB. The Innovation Campus would ensure environmental stewardship and radiological safety through a risk-informed framework that integrates proven site operating practices, robust monitoring, and coordinated emergency preparedness across all functions.

Emergency response: Current environmental stewardship practices at SRS follow established exposure control limits, comprehensive radiological protection programs, engineered containment and filtration systems, accident analysis and natural phenomena hazard evaluations in accordance with all DOE nuclear safety directives, and robust emergency management and emergency response capabilities. Similar emergency response training and practices would be instated at the Innovation Campus to ensure preparedness in case of an emergency.

Environmental monitoring: Environmental compliance is maintained through integrated programs addressing air and water permits, waste management, groundwater protection, ecological monitoring, and long-term stewardship under RCRA, CERCLA, and related statutes. Continuous environmental monitoring programs have been in operation since 1951 and are adaptive, with new elements added as site missions evolve. Additionally, SRS hosts the Savannah River Ecology Lab (SREL), a research institute by the University of Georgia, to evaluate the impact of the site's operations on the environment via research, education and outreach. SREL also conducts environmental research related to radioecology, remediation, and environmental stewardship and health that could be leveraged at the Innovation Campus.

Safety protocols: The ESOP provides independent oversight of the DOE nonregulatory environmental monitoring programs by reviewing and assessing environmental activities or systems. It also provides integrated monitoring, sampling, confirmatory measurement and surveillance program on and around the SRS operating facilities, process facilities, deactivation and decommissioning (D&D) and remediation facilities for various media, such as air, surface water, soil, sediments, groundwater, drinking water, milk, food crops, vegetation, fish and wildlife and biological systems. This program is designed to detect and evaluate releases of hazardous, toxic, chemical, and/or radiological materials on SRS and the surrounding area and to assess impacts to public health and the environment. An annual report is generated to disseminate information to the public.

Regulation Compliance: FFA documents streamline CERCLA and RCRA corrective action requirements (including the incorporation of public notice and input). A similar approach is employed through the RCRA permitting team approach and the SRPPF new mission team approach to holding collaborative meetings, joint site visits, and scoping sessions with great success and again serves as a template for excellence. The RCRA permit covers the entire SRS facility and is one of the pillars for overseeing long-term institutional controls at the facility. As an EPA-delegated State, SCDES is the lead regulatory agency for RCRA requirements. These established facilities and programs position South Carolina to minimize public radiation exposure risk while maintaining transparency and public confidence. Long-term ecological monitoring and baseline environmental data management are supported through academic partnerships to ensure objective surveillance and continuity of records. Performance at SRS demonstrates that the maximum potential dose to a member of the public from site releases is maintained at less than 1 millirem per year which is well below the DOE limit of 100 millirem per year. Additionally, the site could utilize advanced monitoring technologies, such as AI-enabled environmental surveillance systems demonstrated in recent groundwater plume monitoring initiatives, to enhance predictive capability and long-term stewardship.

NNSA, the SRS site landlord, requires strict compliance for all tenant activities. Prospective operators would meet or exceed applicable DOE and/or NRC standards. Where appropriate, tailored regulatory approaches could be pursued through established DOE processes, without diminishing safety or environmental protection requirements.

13. Transportation Corridors

South Carolina's road, rail, river, and port systems provide a strong, operational foundation for the secure movement of nuclear materials. Currently, the SCDES Radioactive Waste and the RCRA Permitting programs coordinate with DOE for transportation of waste shipments. This collaboration will continue with DOE and through any public-private venture for the Innovation Campus. **Highway Infrastructure:** South Carolina's interstate network including I-20, I-26, I-77, I-85, and I-95 supports routine shipments of fresh fuel, research reactor fuel receipts, and other regulated materials. These movements occur regularly under established federal and state requirements with a strong safety record. **Port Access and Maritime Capability:** The Port of Charleston, the deepest port on the East Coast and one of the nation's leading container and breakbulk ports, has supported DOE shipments, including receipt of foreign research reactor surplus nuclear materials at Joint Base Charleston for onward rail transport to SRS. The port offers on-dock rail, secure terminals, heavy-lift capability, and intermodal connectivity to CSX and Norfolk Southern mainlines and already has all the facilities and certifications required to handle and receive

nuclear materials. South Carolina also has an inland port system that extends the Port of Charleston's reach ~200 miles inland through Port Greer and Port Dillon. The Port of Savannah, approximately 18 miles inland, provides additional heavy-cargo capacity and connectivity to SRS via the Savannah River. The Jasper Ocean Terminal (JOT) is a joint venture between South Carolina and Georgia to develop a container port where the Savannah River goes to sea. The JOT is expected to be operational in 2035 and would provide another shipping lane that the Innovation Campus could utilize via the Savannah River. SRS maintains an on-site dock facility that has historically supported barge deliveries of large components and could be upgraded to support oversized or heavy nuclear shipments giving direct access to the Port of Savannah and JOT.

Rail Infrastructure: South Carolina includes more than 2,000 miles of freight rail operated primarily by CSX and Norfolk Southern, with direct connectivity to SRS and the Westinghouse CFFF. SRS maintains approximately 35 miles of dedicated internal rail to move nuclear materials, equipment, and waste under controlled conditions. Infrastructure would need to be expanded to support commercial nuclear shipments using the Atlas railcar. **Packaging and Shipping Capabilities:** The site location near SRS will have access to world-class packaging and shipping expertise at SRNL. Today, SRNL provides packaging and transportation package design, development, and reviews supporting DOE and NNSA missions, including development of numerous certified Type B and fissile packages, training, and certification for safe shipment of surplus nuclear materials, isotopes, and HLW. All nuclear packing transported out of SRS adheres to all regulatory guidelines ensuring a smooth and safe transportation process.

Regulatory Framework: Nuclear material transport complies with applicable federal regulations, including NRC requirements (10 Code of Federal Regulations (CFR) Part 71 and 10 CFR 73, as applicable) and U.S. Department of Transportation hazardous materials regulations (49 CFR). As an NRC Agreement State, South Carolina, through SCDES, conducts licensing, inspection, and oversight activities within its authority, including enforcement of South Carolina Regulation 61-63. Oversized loads require coordination with SCDOT, and any river modifications would require U.S. Army Corps of Engineers permitting.

Challenges: Key corridor considerations include at-grade rail crossings and aging bridge or spur infrastructure that constrain safe and efficient rail movements; limited rail car capacity; limited dredging and navigability along the upper Savannah River that reduce barge optionality for oversized components; and the need to coordinate interstate routing requirements for sensitive shipments. In addition, public perception, rooted in historical

concerns about accident risk and environmental impacts, remains a factor for high-visibility nuclear material transport.

Mitigation Strategy: To directly address these constraints and strengthen readiness for the Innovation Campus, South Carolina (with potential support and financial assistance from the federal government) could pursue targeted infrastructure and operational improvements aligned to each challenge: Expand rail capacity and sidings at port and inland transfer points and improve last-mile access to relieve congestion and reduce crossing conflicts; continue with plan to add 4 additional Atlas rail cars; modernize select highway segments and mitigate rail crossing constraints to enhance safety and reliability for heavy or hazardous shipments; evaluate upgrades to the SRS dock and selective river dredging to preserve barge capability; leverage SRNL's nationally recognized expertise in certified packaging, route planning, and emergency responder training to ensure regulatory compliance and operational safety across interstate corridors; and implement structured stakeholder engagement.

14. Proposed Agreement Framework

South Carolina anticipates that development and operation of an Innovation Campus would be supported through a structured combination of private-sector investment and targeted federal financial mechanisms, consistent with DOE's stated preference for majority private capital and conditional federal participation.

Consistent with this framework, private partners would fund most capital expenditures associated with facility construction, advanced manufacturing, reactor deployment, fuel cycle infrastructure, and related commercial activities. South Carolina's existing economic development model supports capital intensive projects through competitive incentive structures, infrastructure coordination, and dedicated project management. Historically, similar private sector investments have offered long-term, contracted revenue streams (e.g., PPAs), strategic market positioning in a high-growth sector, and risk-sharing structures that enhance return while leveraging targeted state or federal support. (See *Letters of Support Addendum for additional detail on potential industry partnerships in South Carolina.*)

For activities aligned with federal objectives, such as advanced reactor demonstration, safeguards-related capabilities, enrichment-related functions, or national security priorities, federal participation may be structured through existing authorities, including cooperative agreements, cost-sharing mechanisms, loan guarantees, or other financial assistance tools available under the Atomic Energy Act of 1954 and the Energy Policy Act of 2005. Where critical material or national security considerations are implicated, voluntary

agreements under the Defense Production Act (DPA) may also be appropriate, subject to statutory authority. The appropriate vehicle would vary by lifecycle function—for example, research and demonstration activities may rely on cooperative agreements, while commercially financed infrastructure may utilize loan guarantees, and activities implicating national security priorities may consider authorities under the DPA, subject to further definition in partnership with DOE.

South Carolina also maintains existing pathways to deploy state-level economic development resources to support business expansion, infrastructure readiness, and workforce development aligned with Innovation Campus activities. As later phases of federal review and down-selection progress, the State is prepared to coordinate closely with DOE to align the appropriate combination of private capital, state facilitation, and targeted federal financial tools necessary to support timely implementation. Governance structures would be defined in coordination with DOE and private partners and could include public-private partnership models, special purpose entities, or federally led structures depending on function and financing approach.

The overarching principles are to ensure that agreement structures appropriately allocate risk, prioritize private-sector leadership, apply targeted and time-limited federal support, and provide financial discipline while enabling federal-state collaboration on activities of national significance.

15. Technology and Industry Partnerships

South Carolina has extensive experience and demonstrated capability across technologies spanning the nuclear lifecycle. The State's approach is grounded in long-standing, cross-sector partnerships among laboratories and research institutions, universities, and private industry. These stakeholders form an ecosystem positioned to support an Innovation Campus that leads in secure nuclear reactors and systems, backend fuel cycle innovation, and national security aligned infrastructure. To support these campus functions, South Carolina has considerable experience and resources across various specific technologies including advanced reactor designs (e.g., SRNL's leading fuel cycle fusion R&D, USC's 1 MWth electrically heated microreactor demonstration unit, V.C. Summer restart, etc.), reprocessing methods (e.g., SRS surplus plutonium disposition, Savannah River Plutonium Production Facility), and AI-driven data center systems (e.g., hyperscaler investment in South Carolina, SRNL's partnerships with U.S. Army Cyber Command and the Defense Cyber Fusion Innovation Center). *(See Question 1 for additional detail on South Carolina's technological experience and capabilities across the nuclear lifecycle.)*

At the center of South Carolina's technology ecosystem is SRNL, which provides unique national lab assets that accelerate science and technology deployment, including engineering expertise, advanced materials, systems integration experience, and commercialization infrastructure. SRNL also anchors collaboration models that connect sectors, including through its partnership with the U.S. Army Cyber Command and the Defense Cyber Fusion Innovation Center to explore AI, cybersecurity, communications, and power systems for data centers and other critical infrastructure. In parallel, the lab's AMC further integrates laboratory, academic, and private sector capabilities to translate applied science and technology innovation into deployable manufacturing solutions. These resources and partnerships are further complemented by eiX, a collaboration between SC NEXUS and SCRA that provides advanced energy technology startups with capital and resources required to advance technologies from laboratory validation to commercial deployment.

SRNL works closely with South Carolina's 50+ direct nuclear industry participants that contribute to the State's leadership in advancing nuclear innovation. These companies operate within a coordinated, pro-business environment that attracts private sector participation through incentive structures, tax benefits, streamlined permitting and site access pathways, transportation access, and infrastructure readiness planning. Importantly, South Carolina's private partners are embedded within a tightly integrated ecosystem, collaborating closely with SRNL, universities, and state leaders to accelerate technology deployment and commercialization. *(See Question 3 and the Letters of Support Addendum for additional detail on industry partners.)*

South Carolina's 56 colleges and universities provide complementary depth across nuclear engineering, materials research, talent development, and applied innovation. Through the BSRA, Clemson University, South Carolina State University, the University of South Carolina, Georgia Tech, and the University of Georgia are structurally linked with SRNL. This alliance formalizes sustained collaboration between SRNL and leading research institutions and enables coordinated support for cutting-edge research across the value chain. Select university offerings include:

Clemson University drives nuclear innovation through its Center for Nuclear Environmental Engineering Sciences and Radioactive Waste Management (NEESRWM) and its 16 affiliated faculty lead 13 active research projects with over \$10M in current funding across areas including radioactive waste management, radiation detection, and radiochemistry. Facilities include 11 radiochemistry laboratories totaling over 2,500 ft². The RadFATE and RadFLEX (located at SRS and developed with SRNL) testbeds evaluate the performance of nuclear waste subsurface disposal, informing disposition strategies

through innovation and efficiency. Clemson also hosts the Duke Energy e-Grid and EDGE modular AC/DC mobile grid emulator to provide in-field testing exposure. It is one of the few U.S. universities where students can work with heavy radioactive elements in laboratory settings. Each year, the University has ~25 graduate students and ~60 undergraduate minors participating in nuclear-focused work, and several faculty hold federal board advisory roles (e.g., DOE-EM) and joint national laboratory appointments. Collectively, these resources and partnerships position Clemson as a foundational partner for the Innovation Campus by advancing applied research, testing, and workforce development capabilities critical to backend fuel cycle innovation and long-term waste management solutions.

The Medical University of South Carolina (MUSC) supports one nuclear medicine resident per training cycle (with potential expansion) and is developing a multi-disciplinary clinic integrating nuclear medicine, medical oncology, and radiation medicine. The Nuclear Medicine Midlands Technology Program, based in Columbia, sends students to complete clinical rotations with MUSC's nuclear medicine technologists, strengthening statewide training pipelines. As the only quaternary medical facility in South Carolina, MUSC Health provides the highest level of specialty and referral care in the State and maintains advanced clinical, research, and public health infrastructure aligned with complex medical and radiological needs. MUSC also hosts the South Carolina Burn Center and the Hollings Cancer Center, each the only centers of their kind in the State, providing critical statewide capacity for specialized trauma care, oncology, and radiation treatment services that strengthen South Carolina's medical preparedness for large-scale industrial and radiological activities. MUSC's Charleston Division has been a designated Radiation Injury Treatment Network (RITN) center since 2011, participating in a federally coordinated response system supported by the Department of Homeland Security (DHS), the Department of Health and Human Services, Assistant Secretary for Preparedness and Response (DHHS-ASPR), and the National Disaster Medical System. MUSC is also one of only two National Telehealth Centers of Excellence in the nation and delivers urgent, primary, and specialty telehealth services statewide, strengthening distributed access to care and surge capacity. MUSC maintains internal radiological emergency preparedness capabilities to manage both large-scale and localized incidents involving radioactive materials, reinforcing statewide resilience for nuclear-adjacent operations. Through these capabilities, MUSC can serve as an essential medical and public health partner to the Innovation Campus, ensuring advanced clinical expertise, and radiological response capacity aligned with complex nuclear operations.

South Carolina State University (SCSU) hosts the nation's only four-year undergraduate nuclear engineering program offered by an HBCU. The program is supported by a donation

from Duke Energy and features one of 10 NuScale Energy Exploration (E2) Centers in the world, providing students with hands-on advanced nuclear plant operations experience via the reactor operation simulator. High-impact research at SCSU spanning nuclear fuels, advanced reactors, radiochemistry, advanced manufacturing, and energy and environmental sciences is also expanding through support from the Research and Workforce Development Partnership with SRNL / BSRA and a \$40M South Carolina Commission on Higher Education grant shared between SCSU, Clemson, and USC. As a result, SCSU can be an anchor for expanding the Innovation Campus' talent pipeline, advancing inclusion in nuclear engineering, and accelerating hands-on workforce readiness aligned with next-generation reactor and fuel cycle deployment.

The University of South Carolina (USC) offers advanced nuclear engineering capabilities through its graduate Nuclear Engineering program and affiliated research centers within the Molinaroli College of Engineering and Computing (MCEC). USC hosts two SmartState™ Centers of Economic Excellence, endowed by industry partners including Westinghouse, Duke Energy, Dominion Energy, Studsvik, and General Atomics, and is establishing the USC Institute for Actinide Materials (UIAM), which provides integrated laboratory capability for transuranic materials research, molten salt chemistry, advanced fuel development, and surrogate-based process testing aligned with DOE mission needs. Its Laboratory for Spent Fuel Storage, Handling, and Disposition serves as a hub for advanced disposition methods, featuring a large instrumented vacuum chamber and full-scale light-water reactor (LWR) fuel assembly testbed supporting storage, corrosion, and performance studies. This capability supports advanced technologies and more informed planning for long-term disposition pathways. Research sponsors and collaborators include SRNL, Idaho National Laboratory (INL), Oak Ridge National Laboratory (ORNL), Los Alamos National Laboratory (LANL), Westinghouse, General Atomics, Holtec, Orano, and NASA. The university hosts the Carolina Institute for Battery Innovation (CIBI) in partnership with SC NEXUS, to advance battery education, applied research, and manufacturing through training and innovation on the nanoscale, grid-scale, and between. Also, the MCEC has announced plans for a Center for Nuclear Innovation, supported by industry partners. It is planned to include a 1 MWth electrically heated microreactor demonstration unit to support research, operations training, and workforce development, positioning the university as a nationally relevant partner across advanced fuels, backend fuel cycle research, and next-generation reactor deployment. These capabilities position USC as a cornerstone research and workforce engine for the Innovation Campus, enabling integrated front-end, advanced materials, and back-end fuel cycle innovation while supporting commercialization, demonstration, and long-term nuclear deployment at scale.

These university assets are strengthened by the SC Technical College System. For example, Aiken Technical College is one of the top 5 U.S. academic institutions for pre-baccalaureate nuclear-related degrees and makes up ~15 percent of national completions as of 2024. Through the SRS Apprenticeship School and related registered apprenticeship and certificate programs, the technical colleges deliver classroom instruction and on-the-job training in areas such as nuclear fundamentals and nuclear operations, with such programs winning statewide awards for technical innovation. This integrated model ensures robust talent development for near-term nuclear deployment and long-term operation, with over 800 apprentice graduates to date, and 90 percent accepting full-time positions at the Site.

Importantly, South Carolina's model is inherently cross-sector. Universities supply talent and research depth, SRNL and its partners validate and mature technologies through collaborative pathways, and industry partners co-develop and deploy solutions. Building on prior cross-sector collaboration across major energy and infrastructure initiatives, South Carolina has established connective tissue and governance structures to align stakeholders in support of key Innovation Campus functions.

16. Secondary Waste Management

South Carolina would explore the siting of private sector players to manage secondary waste streams generated by Innovation Campus activities through a compliant, integrated approach leveraging existing commercial disposal capacity and following established regulatory frameworks.

Existing Disposal Sites: Current lifecycle pathways at SRS and with SRMC demonstrate expertise in waste management and access to existing disposal sites. High-level waste is treated through vitrification at DWPF, with vitrified canisters stored in GWSBs pending a federal repository decision (with rail as the anticipated shipping mode). Low-level waste is disposed of onsite in engineered disposal units or shipped offsite as appropriate, and transuranic waste is characterized, packaged, and transported by truck to the Waste Isolation Pilot Plant (WIPP) in compliance with federal requirements. H Canyon further strengthens this lifecycle framework by providing chemical separations capabilities that directly minimize secondary waste generation. These established pathways provide an operational template for secondary waste management at the Innovation Campus. Commercial-scale secondary LLW streams (e.g., contaminated equipment, filters, resins, sludges, and protective materials) could be sent to the EnergySolutions Barnwell Disposal Facility, a licensed commercial LLW site operational since 1971. Barnwell is authorized to dispose of Class A, B, and C waste from Atlantic Compact states (South Carolina, Connecticut, and New Jersey), providing a reliable in-state disposal option that minimizes

transportation risk, reduces cost, and enhances schedule predictability. Ensuring appropriate acceptance pathways for DOE and commercial waste streams at Barnwell would be coordinated as part of Innovation Campus implementation planning.

Regulation Compliance: All secondary waste would be characterized at the point of generation in accordance with South Carolina Regulation 61-63 (Radioactive Materials) and applicable federal standards. The SCDES would oversee licensing, inspections, waste classification, packaging, and transportation compliance (including Regulation 61-83 where applicable). Transportation of nuclear materials would adhere to all federal and state regulations and would utilize the transit corridors highlighted in Question 13. The SCDES Radioactive Waste and RCRA Mixed waste programs will continue to coordinate closely with DOE and NNSA, along with any public private venture to ensure proper permitting / licensing for waste disposal. Treatment, volume reduction, interim storage, and shipment would follow established waste acceptance criteria and certified packaging requirements.

Potential Investments: The State is open to exploring extensions for the DWPF and SWPF which currently have decommissioning dates of 2037. The EnergySolutions Barnwell Disposal Site is estimated to have capacity of ~1M ft³ with the potential to increase capacity to ~2M ft³ through investments in progressive trench operations. Current disposal volumes vary year to year, but on average the Barnwell site accepts ~15k ft³ annually. In parallel, South Carolina is open to evaluating the development of new greenfield disposal capacity for secondary waste streams generated by Innovation Campus activities. This could include purpose-built, appropriately licensed facilities designed to complement existing commercial pathways, provide long-term disposal certainty, and reduce capacity constraints as campus operations scale.

Additional partnerships with SRS and SRNL to expand pre-treatment, packaging, waste minimization, and recycling capabilities can also be explored. Through coordinated oversight, transparent engagement with local stakeholders, and continued environmental monitoring, the Innovation Campus would ensure safe, compliant, and cost-effective management of all secondary waste streams.

17. Government Furnished Data/Technology/Equipment

South Carolina welcomes collaboration with the DOE and other federal partners to jointly develop data systems, technology platforms, and specialized equipment aligned with evolving federal guidance and Innovation Campus requirements. Select government-furnished assets would accelerate near-term execution through facility operations support, process optimization, remote monitoring, and cost reduction, while enabling a durable,

private-sector-led Innovation Campus aligned with DOE objectives. Targeted assets or capabilities that would most directly shorten schedules, reduce costs or technical risk, and enable early facilities to come online include:

- **DOE-EM data assets:** Access to cleanup mission data, including process instrumentation data from facilities, environmental monitoring programs, and laboratory analyses, would enable new applied R&D, demonstration and operational use cases, and faster training and validation of AI models. This would accelerate deployment across the nuclear lifecycle, particularly in environmentally sensitive stages such as reprocessing, waste stream disposition, and decommissioning.
- **AI initiatives and governance frameworks** (DOE-EM and NSA): Access to DOE-developed AI technologies, practices, and policies would accelerate nuclear-powered data center operations and real-time monitoring.
- **Genesis Mission infrastructure:** Leveraging DOE's advanced computing backbone would be a critical enabler for delivering secure, national security-aligned data centers. This includes hardware / software infrastructure (e.g., American Science Cloud and Transformational AI Models Consortium) and advanced computing capabilities (e.g., AI tokens, GPU/CPU resources).
- **DOE-furnished technology packages and reference designs:** Access to select DOE-developed and DOE-funded assets such as reprocessing technologies, advanced separations IP, safeguards, and reference reactor designs would reduce technical uncertainty, accelerate engineering and procurement, and enable faster licensing pathways for fuel cycle facilities, advanced reactor deployment, and additional stages.

South Carolina will leverage these government-furnished assets primarily through SRNL, which operates as a DOE national laboratory under its managing and operating Prime Contract. The U.S. Government retains ownership of most data, intellectual property, and technical assets generated through SRNL research, with SRNL authorized to manage and deploy them consistent with the Prime Contract, DOE policy, applicable export control regulations, and agreement-specific terms. BSRA / SRNL currently holds data assets (subject to distribution limitations and regulations including 10 CFR Part 810 protocols), infrastructure and equipment access governed by DOE property policies, and reference drawings, technical designs, and intellectual property through licensing agreements consistent with DOE and Prime Contract regulations. Further DOE authorization is required for cooperative agreements (CRADAs), strategic partnership projects (SPPs), exclusive license agreements, release of export-controlled information, and access to DOE-owned facilities. This is principally facilitated by SRNL's Technology Partnership Office, the lab's

central hub for innovation, intellectual property stewardship, and external collaborations. The office is responsible for ensuring clear partnership structures, defined IP terms, appropriate technological transfer to the marketplace, and compliance with DOE policy.

Supported by SRNL and other entities, South Carolina has experience aligning data governance with appropriate DOE standards and structuring intellectual property terms to enable commercialization by private partners while maintaining protection for the relevant owners and federal stakeholders. South Carolina also recognizes that access to certain datasets and technologies may be constrained by classification and national security determinations, and is prepared to operate entirely within those constraints, which may include clearance requirements and segmented facilities.

Importantly, South Carolina views DOE support as catalytic rather than permanent, enabling private- sector-led deployment while maintaining strong federal-state alignment. For example, SRNL is working with SC NEXUS, DOW, and other federal entities to develop a total of 34 miles of isolated transmission / distribution line access and advanced cybersecurity capabilities; with incremental federal investment and programmatic support, South Carolina could layer nuclear-specific applications onto this backbone infrastructure.

18. International Export Capabilities

South Carolina is structurally positioned to support international nuclear exports through its integrated trade infrastructure, established processes that facilitate export compliance, and state-level policy alignment that supports global partnerships.

The State's multimodal logistics network enables the safe and efficient movement of oversized, heavy, and specialized nuclear components. Key assets include:

- **Port of Charleston:** Deep-water port and one of the nation's top container ports, capable of handling oversized reactor components, breakbulk cargo, and specialized nuclear shipments. The port is supported by rail intermodal connections with potential links to corridors including Inland Port Greer and Inland Port Dillon.
- **Port of Savannah:** Regional hub for oversized or heavy cargo located ~18 miles inland on the lower Savannah River in Georgia. SRS maintains dock facilities near T Area capable of supporting barge offloading for select nuclear shipments (e.g., low-level radioactive waste).
- **Rail network:** ~2,400 miles of rail infrastructure, primarily operated by Class I railroads and supported by short lines providing local connections.
- **Highway network:** Over 60,000 miles of public roads, including major interstates such as I-20, I-26, I-95, I-77, and I-85.
- *(See question 13 for additional details on transportation infrastructure.)*

South Carolina's export readiness is grounded in demonstrated experience handling nuclear materials in compliance with federal safety and security standards. Export activity would be executed through established U.S. compliance pathways, including the International Traffic in Arms Regulations (ITAR) and Export Administration Regulations (EAR) requirements as applicable, NRC Part 110 licensing guidance for nuclear material exports, and DOE or interagency review processes where required.

This compliance is reinforced through partners such as SRNL, whose capabilities include packaging and transportation support for DOE and NNSA missions, technical review of export license applications to ensure regulatory compliance, direct facilitation of nuclear material export via the Port of Charleston, and training and advisory support to foreign partners and multilateral export control regimes. Leveraging its established relationships with major stakeholders across the State, SRNL would coordinate closely with private partners and federal export authorities to support license applications and safeguard integration. South Carolina recognizes that licensing timelines and geopolitical trade considerations may influence exports and is prepared to align with the relevant federal determinations and interagency requirements accordingly. In addition to strengthening U.S. national security objectives, this established export control and safeguards infrastructure increases confidence for private sector partners seeking access to the broader global nuclear market.

At the state level, South Carolina's economic development and research ecosystem is oriented toward international partnership formation and export growth while operating within federal export control, safety, and security frameworks. The State's integrated approach and robust research infrastructure promotes responsible foreign collaboration and provides clear pathways for establishing compliant cross-border partnerships. As a result, South Carolina has the highest concentration of foreign direct investment jobs, with more than 1,200 foreign firms operating within the State.

Because of this foundation, South Carolina already has strong experience enabling international exports. Historically, DOE has transported foreign research reactor surplus nuclear material through the Port of Charleston (Joint Base Charleston Naval Weapons Station), with rail transport to SRS via CSX's Charleston Subdivision. This corridor spans from Charleston to Aiken County and has also supported the transport of surplus nuclear materials and UF₆. In parallel, the Westinghouse CFFF has longstanding experience manufacturing and transporting nuclear materials including fresh fuel assemblies (e.g., for pressurized water reactors) for domestic and international customers, using regulated

highway and rail routes and specialized packaging designed to prevent environmental release in accident scenarios.

These precedents demonstrate the State's ability to manage complex nuclear shipments within existing regulatory frameworks. Underpinned by this foundation, South Carolina exported approximately \$266M of nuclear components in 2025, ranking second of all States. Approximately 95 percent of these exports consisted of isotopic separation machinery and parts. An integrated Innovation Campus could help further scale these existing export capabilities, strengthening domestic manufacturing and advancing U.S. geopolitical leadership in global nuclear exports.

19. Constraints and Inhibiting Factors

South Carolina recognizes that development and operation of an Innovation Campus will require coordinated management of infrastructure, regulatory, logistical, and financial considerations. While the State does not identify structural barriers that would preclude successful siting or operation, several practical factors must be addressed proactively to ensure timely and cost-effective implementation.

First, certain functions, particularly enrichment-related operations, advanced manufacturing, and co-located data centers, may require incremental expansion of grid capacity and transmission interconnection. Infrastructure requirements will be evaluated in coordination with utilities, transmission operators, and relevant state agencies to confirm site suitability and sequence upgrades alongside regulatory approvals.

Second, permitting and regulatory coordination across federal, state, and local authorities presents a potential source of delay if not aligned from the outset. Particularly for functions involving reprocessing or waste disposal, additional constraints may include NEPA sequencing, RCRA/CERCLA alignment for certain activities, and the need to define clear material ownership, custody transfer, and long-term disposition pathways. Mining-related activities may introduce additional siting, environmental review, and permitting considerations. Activities such as reprocessing, advanced separations, waste handling, or advanced reactor deployment involve overlapping review processes across multiple jurisdictions. The State's approach is to engage regulators early, pursue concurrent rather than sequential review where feasible, and leverage precedents established at SRS and V.C. Summer to reduce duplication. In addition, SRNL's RCE provides dedicated technical expertise to support legislative and permitting strategy. As outlined in Question 10, South Carolina requires clarification from DOE and federal partners on several core implementation parameters, including the anticipated quantity and form of used nuclear fuel; the potential sources and transportation pathways for such material; the scope of

federal support available; and what modifications to existing federal statutes and regulatory frameworks, including the NWP, are being pursued.

Third, construction cost and project timeline overruns remain relevant considerations, particularly given recent national experience with large-scale nuclear builds. Supporting industries such as advanced manufacturing, housing and community development, and ancillary sectors may also face long-lead equipment procurement, quality assurance considerations, and vendor qualification requirements that must be addressed early to avoid downstream schedule impacts. Lessons learned from recent regional nuclear projects such as the Vogtle Unit 3 & 4 and V.C. Summer Unit 2 & 3 reactor construction projects will inform the State's approach to defining contracting structures, transparent oversight frameworks, and early supply chain alignment. The State will also leverage public-private partnerships where appropriate to distribute construction risk and support financial resilience.

Finally, workforce scaling will be an important factor. The State is prepared to coordinate with technical colleges, universities, and industry partners to expand South Carolina's established nuclear workforce base and ensure sufficient skilled labor capacity to support simultaneous deployment of multiple Innovation Campus functions. For example, Aiken Technical College's Nuclear Fundamentals Apprenticeship Program, offered in partnership with SRS, is the largest program of its kind in the U.S. (*See Question 21 for additional detail on workforce development.*)

20. Unaddressed Considerations

In implementing an Innovation Campus, DOE may wish to consider several structural advantages that extend beyond site readiness and directly support national nuclear revitalization objectives.

Regional Nuclear Cluster Integration: South Carolina is an important link in the multi-state nuclear corridor spanning commercial reactors, federal nuclear missions, and maritime logistics across South Carolina, North Carolina, Tennessee, and Georgia. Proximity to the Ports of Charleston and Savannah and regional supply chain networks enable integrated deployment rather than isolated development, reducing execution and schedule risk while strengthening regional energy resilience. The SRS region alone hosts over 12 major nuclear sites including laboratories, legacy sites, fuel engineering or fabrication facilities, and waste management facilities, forming a concentrated nuclear cluster that can anchor the region's nuclear ecosystem.

Fuel Engineering, Reprocessing, and Material Stewardship Continuity: South Carolina maintains longstanding capabilities across fuel reprocessing, advanced separations,

plutonium stewardship, and management of advanced fuel forms, including tri-structural isotropic (TRISO) related materials and graphite handling at SRS. In light of growing uranium supply constraints and global trade insecurity affecting nuclear fuel markets, continued exploration of domestic fuel cycle capabilities is increasingly important to national energy security. The 2020 plutonium settlement agreement between South Carolina and the DOE established binding processing and removal milestones, reflecting sustained federal–state coordination in materials management. Locating Innovation Campus functions within this existing accountability framework provides continuity and reduces execution risk.

Defense Alignment: South Carolina maintains one of the most significant defense footprints in the region, with eight major military installations contributing approximately \$35B annually to the State’s economy and Charleston housing ~50 percent of the nation’s strategic airlift capability. Joint Base Charleston is a core asset, hosting the Naval Nuclear Power Training Command (NNPTC) in Goose Creek, which serves as one of the Navy’s premier training pipelines where every nuclear operator receives rigorous 52-week instruction. Approximately 400 service members retire from Joint Base Charleston each year, providing a steady stream of highly trained, nuclear-experienced personnel into the civilian workforce. In addition, South Carolina collaborates closely with the U.S. Army Cyber Center of Excellence at Fort Gordon, including through a partnership with SRNL. The State’s density of high-impact defense assets and capabilities align closely to broader national security and cybersecurity objectives.

Maritime Access: Maritime access also creates optionality for naval nuclear applications, including potential floating nuclear power plant (FNPP) deployment. The integration of maritime access and logistics, advanced manufacturing, and defense missions positions the Innovation Campus to advance national security and energy independence priorities while simultaneously strengthening the domestic industrial base and export leadership.

AI and Telecommunications Infrastructure Readiness: The region surrounding SRS maintains unique telecommunications capacity, including trunk lines and dark fiber networks critical to AI data center development. Co-locating nuclear lifecycle functions with this digital infrastructure strengthens integration between advanced energy generation and next-generation computing demand, including recent NNSA-related energy and AI infrastructure initiatives. By pairing firm, secure energy with cutting-edge computing, South Carolina positions itself to serve as a deployment platform where advanced nuclear capabilities and next-generation computing reinforce one another, simultaneously strengthening national priorities such as a robust industrial base, energy independence, grid resilience, and U.S. leadership in both nuclear and AI domains.

Large-Scale Infrastructure Coordination: South Carolina has demonstrated the ability to deliver large-scale infrastructure projects through federal-state partnerships, including the Charleston Harbor Deepening Project and the Camp Hall industrial development. These projects illustrate the State’s ability to effectively coordinate public infrastructure investment, private capital, and federal partners to support major industrial development.

21. Additional State Information

South Carolina’s suitability to host an Innovation Campus extends beyond technical capability. The State has established systems to mobilize workforce, infrastructure, and community support at scale for complex, capital-intensive projects.

Workforce Development Infrastructure: Nationwide deployment of advanced reactors, fuel cycle facilities, and nuclear-powered data centers will be influenced by skilled labor availability. South Carolina recognizes that the concurrent development of the SRPPF and an Innovation Campus will increase demand for technical, craft, and professional labor.

Today, the State maintains a substantial nuclear-related workforce of ~16,000 individuals across power generation, manufacturing, engineering, and services, and was identified by the DOE as a top state for nuclear jobs in 2025. The envisioned South Carolina Innovation Campus is estimated to support direct employment of ~15,000 jobs at maturity, with substantially higher temporary construction employment of ~40,000 during phased build-out. Sample efforts to develop the workforce needed for the Innovation Campus include:

- Academic grants and scholarships:** Between 2011 and 2026, DOE & NNSA invested \$23.3M in curriculum, training, and scholarships, and in 2025 committed an additional \$5.8M over the next five years with an additional \$5M anticipated. This Federal investment through DOE and NNSA includes recurring funding for the WORC program, and foundational funding through the Advancing Nuclear Skills Regionally (ASNR) grants. These programs have strengthened regional training pipelines directly supporting DOE-EM and NNSA missions, as well as private sector nuclear projects (e.g., Plant Vogtle). South Carolina has also deployed ~\$95M towards statewide workforce funding for programs via the SC WINS Scholarship within the SC Technical College System. Through these programs, institutions such as Aiken Technical College, University of South Carolina Aiken, and other partner universities have stood up or expanded curricula in nuclear fundamentals, radiation protection, industrial maintenance, welding, and apprenticeship tracks aligned to site demand. These initiatives have provided ~3,550 student scholarships and reached more than ~30,000 K-12 students.

- **Military and veteran training programs:** Each year, approximately 400 military personnel retire from Joint Base Charleston, with roughly one-third remaining in South Carolina. The NNPTC at Joint Base Charleston operates a 52-week training pipeline for Navy nuclear operators, providing a steady source of highly trained technicians, maintainers, instructors, and IT specialists familiar with regulated nuclear environments. In addition, approximately 1,800 service members separate annually from Fort Gordon, home of the U.S. Army Cyber Training School, creating a significant pool of local, cybersecurity-trained professionals well aligned with AI data center operations and Genesis-related digital infrastructure initiatives.
- **ReadySC best-in-class training and incentives:** South Carolina's readySC program delivers employer-driven, customized pre-employment training aligned directly to project-specific needs at no cost to participating companies. During 2024-2025, readySC supported more than 80 companies and trained ~4,200 workers across manufacturing, distribution and logistics, and other industries. The readySC program has also received several awards for excellence in training, economic development, and job creation.
- **Employer collaboratives:** Employer collaboratives within the utility and manufacturing sectors ensure curriculum remains aligned with real-time workforce requirements, while SC NEXUS workforce initiatives expand early-stage exposure to advanced energy careers. Together, these mechanisms provide a structured, scalable pipeline capable of supporting sustained nuclear lifecycle expansion.

Economic Development and Infrastructure Coordination: South Carolina's economic development framework supports large-scale industrial projects through structured interagency coordination, incentive structures, and infrastructure readiness planning. The State has repeatedly mobilized transportation, utilities, permitting, and site preparation in support of advanced manufacturing, aerospace, energy, and defense-aligned investments.

With a 5 percent corporate income tax, South Carolina maintains one of the lowest rates in the southeast. Many qualifying companies benefit from a Job Tax Credit that can eliminate up to 50 percent of corporate income tax liability for a specified period. Additional statutory advantages include no state property tax, no inventory tax, and no sales tax on utilities, manufacturing machinery, or manufacturers' raw materials. Further exemptions are available for qualifying companies meeting certain criteria for construction, technology intensive, and data center materials.

South Carolina's incentive model ties support directly to defined capital investment, job creation, and operational benchmarks, ensuring accountability while providing long-term investor predictability. Established site certification processes, utility extension,

transportation access, and environmental permitting pathways allow critical infrastructure and construction activities to proceed in parallel, reducing overall deployment timelines and lowering project risk.

Housing, Urban Planning, and Community Scalability: Simultaneous federal and industrial growth will require coordinated expansion of housing, transportation, and supporting infrastructure. SRSCRO recently completed a regional housing study covering eight counties (four in South Carolina and four in Georgia) identifying projected demand over the next five years, acknowledging the need for increased housing, and enabling advanced planning for zoning, utility extensions, and transportation. The State also recognizes the power, water and sewer capacity will need to be watched and evaluated, alongside the South Carolina Rural Infrastructure Authority (RIA) as Innovation Campus development proceeds.

State and regional planning efforts also integrate healthcare, education, and public safety dynamics to ensure that community services scale in parallel with commercial activity.

Support Industries and Connectivity: The State also benefits from healthcare and educational institutions capable of supporting population growth.

The region includes MUSC Health, the State's only quaternary academic medical center and a designated RITN center since 2011, participating in a federally coordinated radiological response system supported by DHS and DHHS-ASPR. MUSC is also one of only two National Telehealth Centers of Excellence in the nation, delivering urgent, primary, and specialty telehealth services statewide. MUSC and the Medical College of Georgia support environmental health, ionizing radiation training, and disaster response coordination, while the broader regional system, including the Joseph M. Still Burn Center (the largest in the U.S.), Wellstar Medical College of Georgia (MCG) Health (Level I trauma center), and the Charlie Norwood VA Medical Center, provides comprehensive emergency coverage. Academic medical partners and technical colleges further support scalable clinical and radiation safety workforce pipelines aligned with regulated industrial operations.

Regional healthcare and academic institutions coordinate to align enrollment and residency placements, which can enable medical workforce capacity to match industrial growth and Innovation Campus development timelines.

22. Financial responsibility, Cost Sharing, and Assurances

South Carolina can leverage a partnership blueprint to protect ratepayers and enable private investment, based on prior large-scale capital projects across industries. Core Risk Allocation Principles that will be used include:

- **Private Capital Leads; Public Capital Catalyzes:** Private entities fund and assume primary commercial, construction, and operational risk.
- **Federal Tools De-Risk, Not Displace, Private Investment:** Federal cost-sharing, loan guarantees, or DPA mechanisms reduce financing risk but do not transfer repayment or performance obligations to taxpayers.
- **Performance-Based State Support:** Any state incentives are milestone-based, transparent, and subject to clawbacks.
- **No Open-Ended Public Liability:** Robust financial assurance mechanisms must fully cover projected decommissioning, waste management, and remediation costs.
- **Clear Lifecycle Accountability:** Responsibilities across development, operations, and closure are contractually defined and legally enforceable.

The following outlines how we would envision these principles applying in practice across the phases, subject to further discussion and negotiation.

1. Development Phase (Siting, Licensing, Construction)

- **Private Sector Responsibility:** Private Innovation Campus participants would finance the majority of capital expenditures, including design, licensing, construction, and commissioning. Construction, schedule, and performance risks would be contractually allocated through fixed-price or guaranteed maximum price EPC contracts, performance bonds, and parent guarantees.
- **State Role:** South Carolina would focus on expanding enabling infrastructure to support site readiness, utilities, and workforce development, building on its existing, competitive economic framework. The State offers a robust suite of incentives designed to attract and anchor large-scale siting and capital investment. These include the Job Tax Credit (eliminating up to 50 percent of corporate income tax liability), additional corporate income tax credits for R&D, recycling facilities, and alternative fuels, sales and use tax exemptions for manufacturers and technologically-intensive companies, and incentives for revitalizing abandoned buildings. These tools materially enhance site competitiveness and reduce upfront project costs, strengthening South Carolina's ability to attract private sector partners for siting and long-term operations. The State and local communities may also provide additional discretionary incentives (e.g., Fee-in-Lieu of Property Taxes).

Such incentives would include clawback provisions and would not substitute for private equity or debt capital. Moving forward, South Carolina may also explore further expedited permitting and financial support opportunities.

- **Federal role:** Consistent with DOE authorities referenced in the RFI, federal participation during development could include cost-sharing agreements for reactor demonstrations, fuel cycle capabilities, or R&D infrastructure. Loan guarantees may be pursued through DOE's Loan Programs Office to lower cost of capital while maintaining full private repayment responsibility. Further, development of any final disposition infrastructure would require change to federal law (e.g., NWPA) and use of federal funding to support construction.

2. Operations Phase (Commercial Operations, Revenue, and Stewardship)

- **Private Sector Responsibility:** Operators would bear ongoing operating and maintenance costs, fuel cycle expenses, environmental compliance, and routine waste management obligations. Cost recovery would occur through commercial revenue streams.
- **State Role:** During operations, the State's role would focus on regulatory coordination, workforce ecosystem support, environmental oversight, and enforcement of financial assurance requirements. The State would not assume operating losses, market risk, or long-term liability for decommissioning or waste management.
- **Federal role:** The federal government may participate through cooperative agreements or programmatic support for research, testing, workforce development, or innovation activities conducted on the Innovation Campus, consistent with DOE authorities. Where DOE retains statutory responsibility for specific materials or fuel types, stewardship roles and associated financial responsibilities would be clearly delineated. In limited cases aligned with national security objectives, DOE could utilize offtake agreements or strategic purchase commitments.

3. Closure Phase (Decommissioning & Long-Term Stewardship)

- **Private Sector Responsibility:** Private partners would bear primary responsibility for decommissioning, site remediation, and closure-related obligations. Each operator would be required to establish and maintain robust, legally enforceable financial assurance mechanisms sized to independently verified lifecycle cost estimates. Funding adequacy would be reassessed periodically to ensure full coverage of projected end-of-life costs.

- **State Role:** The State’s role during closure would focus on oversight, enforcement, and protection of public interests. South Carolina would require approved decommissioning and remediation plans as a condition of siting and continued operation, monitor the adequacy of financial assurance instruments, and enforce compliance with environmental and closure requirements. The State would not assume decommissioning liabilities.
- **Federal Role:** The federal government’s role in closure would be governed by existing statutory authorities. Where DOE retains or assumes responsibility for specific nuclear materials, fuel types, or long-term stewardship functions under federal law, financial and operational responsibilities would be explicitly defined through negotiated agreements.

Case Study: Restart of V.C. Summer construction with Santee Cooper & Brookfield

- Santee Cooper’s original V.C. Summer reactor expansion project was halted in 2017, leading to substantial ratepayer impact and public dissatisfaction. After initial interest in the reactor site, Santee Cooper initiated a request for proposals process in January 2025, receiving substantial interest from a variety of private sector participants. In May 2025, the Governor signed a joint resolution (2025 S.C. Acts No. 73), which supported Santee Cooper’s solicitation of competitive private sector bids for the restart and completion of V.C. Summer Nuclear Units 2 and 3 and underscored statewide and industry commitment to collaborating to finance large-scale energy and infrastructure projects while protecting ratepayers. In October 2025, Santee Cooper selected Brookfield to restart construction on the plants, marking a historic commitment to domestic nuclear construction. While construction has not yet begun, the new framework between Santee Cooper and Brookfield redefines allocation of construction and performance risk and strengthens oversight mechanisms designed to reduce exposure to customers while maintaining project viability.

As implementation advances, South Carolina stands ready to work in close coordination with DOE to define appropriate cost-sharing structures, financial assurance mechanisms, and risk allocation.

23. Revenue Sources and Cost-Recovery Approaches

South Carolina recognizes the importance of ensuring that long-term obligations including decommissioning, waste management, and environmental monitoring are funded sustainably, transparently, and in a manner that aligns responsibility with benefit. The State’s approach builds on established stewardship frameworks at SRS, including the FFA,

which assigns enforceable cleanup responsibilities, and ESOP, which provides structured funding for independent environmental monitoring. While these precedents operate within a federally owned site, they demonstrate clear assignment of responsibility, enforceable obligations, and dedicated funding for long-term environmental stewardship.

Building on these past experiences, South Carolina's approach to revenue and cost recovery for the Innovation Campus would be guided by the following principles:

- **Beneficiary Pays:** Entities deriving economic or operational benefit from Innovation Campus activities contribute proportionally to lifecycle stewardship costs.
- **Lifecycle Funding from Inception:** Cost-recovery mechanisms are established at project outset to avoid unfunded future liabilities.
- **Transparency and Enforceability:** Financial obligations are embedded in leases, permits, and operating agreements and supported by enforceable financial assurance instruments.
- **Alignment with Federal Law:** Structures are consistent with DOE authorities and federal statutory responsibility for specific materials or fuel types.
- **Protection of Taxpayers and Ratepayers:** No long-term stewardship obligations are left unsecured or implicitly shifted to the public.

South Carolina anticipates that Innovation Campus beneficiaries (e.g., reactor operators, fuel cycle companies, research institutions, data center operators, utilities, and other commercial tenants) would contribute to long-term stewardship through structured mechanisms embedded in contracts (e.g., leases, permits, operating agreements).

These mechanisms may include fixed or tiered user-based contributions, service fees for shared infrastructure or monitoring programs, and project-specific financial assurance instruments such as decommissioning trust funds, bonding requirements, escrow accounts, or equivalent safeguards. Contributions would be calibrated to operational scale, material handling responsibilities, and risk profile to ensure proportionality. Where DOE retains statutory responsibility for certain materials or long-term stewardship functions, cost allocation and funding structures would be clearly delineated in coordination with federal authorities.

A portion of the company-paid fees would fund efforts led by SRNL to develop and select proposed R&D and commercialization projects. Most of the funds would be used to focus R&D on the relevant aspects of the fuel cycle related to the campus (particularly the backend and cleanup), but some would support the nuclear fuel cycle more broadly. This approach is consistent with SRNL's Acceleration of Nuclear Cleanup – High Opportunities

and Risks (ANCHOR) initiative in which industry funds a portion of the pool led by SRNL to focus on backend fuel cycle and cleanup technology development and applications.

Case Study: The Barnwell Low-Level Radioactive Waste Disposal Facility

- The Barnwell LLW Disposal Facility in Barnwell County provides a South Carolina precedent for the cost-recovery and revenue-allocation structures. Operating since 1971, Barnwell is a state-owned, privately-operated nuclear waste facility funded entirely through beneficiary-pays user fees with statutory revenue allocation to host communities, education, and long-term stewardship. The facility is owned by the State of South Carolina and operated under contract by EnergySolutions (successor to Chem-Nuclear Systems), demonstrating the State's capacity to maintain effective public oversight of nuclear operations while leveraging private-sector operational efficiency. Since July 2008, the facility has been restricted to waste from the three member states of the Atlantic Interstate Low-Level Radioactive Waste Management Compact (South Carolina, Connecticut, and New Jersey), and is licensed to dispose of Class A, B, and C low-level radioactive waste. Regarding financing, the General Assembly established a per-unit tax and fee structure requiring waste generators to fund all facility costs, long-term stewardship, and community benefits, including a \$235 per cubic foot tax imposed in 1995; disposal rates approved under the Atlantic Compact Implementation Act cover allowable operator costs plus margin, ensuring full cost recovery from users rather than taxpayers. Under S.C. Code Ann § 48-46-40(E), disposal fee revenues are allocated through a statutory three-tier waterfall to host communities, generator rebates, and the Children's Education Endowment. The Barnwell framework also includes a dedicated Extended Care Maintenance Fund, an escrow mechanism for perpetual care covering custodial, surveillance, maintenance, and post-closure observation requirements. The fund is maintained under regulatory oversight to ensure long-term obligations are fully funded before active operations cease. Taken together, the Barnwell precedent demonstrates that South Carolina has built, maintained, and adapted a statutory, beneficiary-funded nuclear revenue framework across multiple counterparties and decades of operation.

Acronym Guide

AMC: Advanced Manufacturing Collaborative
ASNR: Advancing Nuclear Skills Regionally
BSRA: Battelle Savannah River Alliance
CAB: Citizens Advisory Board
CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act
CFFF: Columbia Fuel Fabrication Facility
CFR: Code of Federal Regulations
CIBI: Carolina Institute for Battery Innovation
CNTA: Citizens for Nuclear Technology Awareness
CPU: Central processing unit
CRADAs: Cooperative Research and Development Agreements
CSX: CSX Transportation (Chessie System and Seaboard)
CTWG: Cyber Threat Working Group
D&D: Deactivation and Decommissioning
DHHS-ASPR: Department of Health and Human Services, Assistant Secretary for Preparedness and Response
DHS: Department of Homeland Security
DOE: U.S. Department of Energy
DOE-EM: Department of Energy Office of Environmental Management
DOW: Department of War
DPA: Defense Production Act
DWPF: Defense Waste Processing Facility
EAR: Export Administration Regulations
ECA: Energy Communities Alliance
EPA: Environmental Protection Agency
EPZs: Emergency Planning Zones
ESA: Energy Security Act
ESOP: Environmental Surveillance and Oversight Program
EWC: Education & Workforce Center
eiX: Entrepreneurship and Innovation Exchange
FFA: Federal Facility Agreement
FNPP: Floating Nuclear Power Plant
GECO: Grid-enabled Cyber Operations
GNAC: Governor's Nuclear Advisory Council
GPU: Graphics processing unit
GSSM: Governor's School for Science and Mathematics

GW: Gigawatt(s)
GWh: Gigawatt-hour(s)
GWSBs: Glass Waste Storage Buildings
HBCU: Historically Black Colleges and Universities
HLW: High-level waste
IAEA: International Atomic Energy Agency
INL: Idaho National Laboratory
IP: Intellectual Property
IRP: Integrated Resource Plan
ITAR: International Traffic in Arms Regulations
JOT: Jasper Ocean Terminal
LANL: Los Alamos National Laboratory
LLW: Low-level Waste
LWR: Light Water Reactor
MCG: Medical College of Georgia
MCEC: Molinaroli College of Engineering and Computing
MMRs: Micro Modular Reactors
MUSC: Medical University of South Carolina
MW: Megawatt(s)
MWth: Megawatt Thermal
NASA: National Aeronautics and Space Administration
NEESRWM: Center for Nuclear Environmental Engineering Sciences and Radioactive Waste Management
NEPA: National Environmental Policy Act
NLIC: Nuclear Lifecycle Innovation Campus
NNPTC: Naval Nuclear Power Training Command
NNSA: National Nuclear Security Administration
NRC: Nuclear Regulatory Commission
NSA: National Security Agency
NWPA: Nuclear Waste Policy Act of 1982
ORNL: Oak Ridge National Laboratory
PNC: Palmetto Nuclear Coalition
PPAs: Power Purchase Agreements
RCE: Regulatory Center of Excellence
RCRA: Resource Conservation and Recovery Act
RFI: Request for Information
RIA: Rural Infrastructure Authority
RFP: Request for Proposal

RITN: Radiation Injury Treatment Network
ROI: Return on Investment
SC: South Carolina
SCCMS: South Carolina Coalition for Mathematics and Science
SCDOT: South Carolina Department of Transportation
SCSU: South Carolina State University
SCRA: South Carolina Research Authority
SMRs: Small Modular Reactors
SPPs: Strategic Partnership Projects
SREL: Savannah River Ecology Laboratory
SRMC: Savannah River Mission Completion
SRNL: Savannah River National Laboratory
SRNS: Savannah River Nuclear Solutions
SRPPF: Savannah River Plutonium Processing Facility
SRSCRO: Savannah River Site Community Reuse Organization
SRS: Savannah River Site
STEM: Science, Technology, Engineering, and Mathematics
SWPF: Salt Waste Processing Facility
TRISO: Tri Structural Isotropic
UF₆: Uranium Hexafluoride
UIAM: USC Institute for Actinide Materials
USC: University of South Carolina
WINS: Workforce and Industry Needs Scholarship
WIPP: Waste Isolation Pilot Plant
WORC: Workforce Opportunities in Regional Careers