

Accelerating America's Small Modular Reactor Moment

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It's no secret America's energy demand is entering a new era. Growth in artificial intelligence, advanced manufacturing, electrification and national security infrastructure is creating unprecedented demand for reliable, affordable and secure power. Nuclear energy – particularly small modular reactors (SMRs) – has been identified as a critical part of that solution.

However, deploying new nuclear capacity fast enough to meet demand will require more than innovative reactor designs. It will require experienced partners who understand licensing, environmental permitting, engineering, project delivery and long-term operations.



Aerial view of a portion of the Savannah River Site

Building momentum

Recent developments demonstrate how quickly the market is evolving. The U.S. Department of Energy's National Nuclear Security Administration recently selected Amentum to enter negotiations for a phased lease supporting one of the nation's largest integrated artificial intelligence and energy infrastructure projects at the Savannah River Site. Once finalized, the project would pair a 1-gigawatt AI data center with approximately 2 gigawatts of on-site power generation, initially fueled by natural gas with a pathway to advanced nuclear generation.

Projects like this demonstrate the potential of innovative approaches to land use, public-private partnerships, the role of nuclear (particularly SMRs) in meeting energy demands and the need for a proven partner like Amentum who can safely and securely bring it all together.

Accelerating deployment

While SMR technology continues to mature, the pace of deployment will depend just as much on efficient licensing and disciplined project execution as it does on reactor innovation.

The U.S. administration's goal of accelerating Nuclear Regulatory Commission reviews reflects growing recognition that regulatory certainty is essential to expanding nuclear generation. Maintaining rigorous safety standards while improving predictability can help bring new reactors online more quickly.

Amentum brings decades of experience supporting complex nuclear programs across the full project lifecycle. Our teams are helping advance multiple advanced reactor programs through licensing, engineering, environmental planning and program delivery while also supporting large-scale nuclear new-build projects around the world. That experience – earned across diverse technologies and regulatory environments – is critical for real world deployment as the advanced nuclear market accelerates.



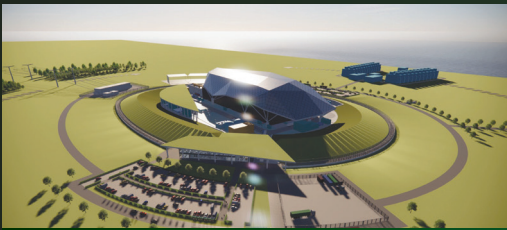
"Big Carl", the world's largest land-based crane, lifts the final liner into place at Hinkley Point C.

Making nuclear projects investable

Financing remains one of the largest challenges for new nuclear generation. Long construction schedules have historically driven financing costs that account for much of a project's overall expense.

SMRs offer the potential to change that equation through standardized designs, modular construction and repeatable project delivery. At the same time, growing energy demand is creating new opportunities for long-term power purchase agreements that improve project certainty.

Amentum is also helping vendors improve the long-term economics of advanced reactors by applying expertise in materials science, aging management and reactor performance to support longer operating lives and more efficient asset management.



Conceptual rendering of the Rolls Royce Small Modular Reactor.



Conceptual rendering of the Westinghouse AP300 Small Modular Reactor.

From momentum to deployment

The industry has spent years proving that advanced reactors can work. The focus now is proving they can be deployed quickly, efficiently and repeatedly at commercial scale.

The nation now has the technology, the demand and growing policy support to usher in a new era of nuclear energy. Success will belong to organizations that can bridge innovation with execution – bringing together engineering, licensing, environmental expertise, project delivery and operational excellence into a single, integrated solution.

At Amentum, that's exactly where we excel. We aren't simply supporting the next generation of nuclear projects – we're making them a reality. The race to build America's nuclear future has begun, and we're leading the way.



Amentum delivers complex nuclear solutions across the nuclear lifecycle through our expansive technical experience and expertise to achieve mission critical objectives. Our integrated program management, deep technical knowledge and innovation delivers excellence, reduces risks and empowers our clients to achieve their mission-critical objectives with confidence and integrity. We uphold the highest standards of safety, security and environmental responsibility, leveraging our expertise and collaborative spirit to advance cost-effective, reliable nuclear solutions that deliver sustainable growth to national economies and wider benefits to local communities.

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