



RTS | Nuclear Energy + AI Newsletter

RTS Nuclear AI Research Statement

The nuclear sector enters 2026 at an inflection point. Artificial intelligence is no longer confined to exploratory use or pilot programs. It is beginning to influence how nuclear work is planned, governed, and executed.

This transition introduces new expectations. The central question is no longer whether AI can be applied to nuclear activities, but whether it is being integrated in alignment with established safety principles, regulatory frameworks, and workforce responsibilities. Evidence across the industry indicates a growing divergence between organizations adopting AI as an adjunct capability and those embedding it within core operational and decision-making structures.

RTS Research is focused on the latter. Our work examines how AI is incorporated within nuclear standards, quality programs, and oversight models where traceability, accountability, and human authority remain essential. In these environments, performance gains are driven by disciplined integration rather than experimentation.

This issue presents observed patterns from operational deployment, workforce analysis, grid intelligence, and advanced reactor development. Across these domains, findings are consistent: AI adoption is advancing most rapidly where governance, execution, and workforce integration progress together.

As part of this ongoing research agenda, RTS Founder and Chief Nuclear Officer Sam Rieck will present current findings at the [Nuclear Business Innovation Conference](#). His remarks will outline emerging approaches to measuring value in nuclear-specific AI applications.

RTS Research provides independent analysis to support long-term nuclear planning and policy alignment. Our mandate is to document credible practice, distinguish signal from conjecture, and inform decisions that will shape the industry over multi-decade horizons.

- RTS Global Research

Ready to talk, let's meet.

Momentum in the Field: Industry Signals and the RTS Perspective

Required Reading

AI at Work: Southern Nuclear’s Adoption of Copilot Agents Drives Fleet Forward

Southern Nuclear is setting an important benchmark for what practical AI adoption looks like inside a nuclear fleet. Their approach is notable not for a single application, but for **scale**. Employees across maintenance, operations, engineering, and safety have built and deployed thousands of AI-supported use cases that directly support daily work.

These tools streamline maintenance planning, improve risk awareness, and put the right information at the fingertips of planners, schedulers, engineers, and technicians.

Raisun Take:
This is required reading because it reflects a truth we see repeatedly in the field: AI succeeds when it supports how work actually happens. Southern’s progress also makes one thing clear — peers are moving quickly, and the definition of “early adoption” has already shifted.

[Read the Article](#)

Workforce Reality Check

DOE-NE: 3 Workforce Trends in Nuclear Energy in 2025

The Department of Energy’s Office of Nuclear Energy highlights rising salaries, strong employment demand, and persistent skills gaps across the nuclear workforce as the industry enters a period of sustained growth.

Raisun Take:
AI does not solve workforce challenges by replacing people. It solves them by reducing friction, preserving institutional knowledge, and enabling experienced staff to focus on higher-value work. Workforce enablement must be part of every AI strategy. RTS is an expert at workforce enablement with AI and can help your team thrive in this new norm.

[Read the Article](#)

Breakthroughs Beyond Fission

UK Atomic Energy Authority Uses AI to Accelerate Fusion Plasma Simulation

UKAEA has introduced GyroSwin, an AI tool capable of modeling five-dimensional fusion plasma behavior in seconds rather than hours or days — a meaningful step forward for fusion reactor design.

Raisun Take:
Fusion timelines may differ from today’s nuclear fleet, but the lesson applies immediately: AI-driven modeling and simulation are becoming foundational capabilities for advanced energy systems. The RTS organization has deep subject matter expertise, including graduate degrees in nuclear science, engineering, and business operations and are ready to model with precision and purpose.

[Read the Article](#)

Grid Intelligence in Practice

Schneider Electric Launches One Digital Grid AI Platform

Schneider Electric’s One Digital Grid Platform brings planning, operations, and asset management into a single AI-enabled environment designed to improve grid resilience, efficiency, and cybersecurity.

Raisun Take:
The RTS Take: Supporting AI-driven load growth and nuclear expansion requires integrated grid intelligence, not incremental digital upgrades. Platforms like this signal where utility operations are headed. Our utility clients are clear that performance improvement is an important aspect of AI integration into the nuclear world.

[Read the Announcement](#)

IAEA Symposium Research – Parts 2 and 3 Now Available

We are pleased to share that Parts 2 and 3 of the RTS Research Special Series— Global Insights from the International Atomic Energy Agency Symposium on AI and Nuclear Energy—are now available.

Raisun Take:
These reports translate global dialogue into **practical, field-first guidance** for nuclear operators, regulators, and suppliers.

- **Part 2:** AI in nuclear operations, construction, and safety — trust, governance, and deployment realities [🔗 Download Part 2:](#)
- **Part 3:** Capacity deployment, supply chain readiness, and workforce transformation [🔗 Download Part 3:](#)

Why this matters:
The symposium confirmed that alignment is forming globally — but **execution will define leadership**. These reports are designed to help organizations move from awareness to informed action.

AI Lights the Way for Nuclear Projects

AI-driven planning tools help teams model schedules and supply chain risk.

Raisun Take:
AI makes risk visible earlier, protecting schedules and budgets.

[Read the Report](#)

What This All Adds Up To

Across operations, workforce, modeling, grid infrastructure, and global policy, one pattern is clear: **AI** in nuclear energy is becoming operationalized not experimental.

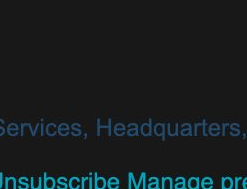
The organizations making real progress are those that:

- Apply AI where work actually happens
- Build workforce enablement alongside technology
- Design systems that scale within nuclear standards

At RTS, we believe the opportunity ahead is not about chasing AI trends. It is about applying AI with purpose, grounded in nuclear reality, and built to last. With multiple signed contracts and clients, we are ready to help you solve your nuclear AI problems.

- RTS Global Research

Schedule a meeting, today!



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