



Raisun | Nuclear Energy + AI Newsletter

The past two weeks in nuclear have made one thing unmistakably clear: the pace of demand **may soon be** out-running the industry’s capacity to deliver. ANS released another update on the Advanced Reactor Pilot Program, steady progress, yes, but also a clear reminder that licensing, documentation, and workforce constraints are slowing the very projects the nation is depending on. At the same time, Constellation publicly acknowledged the scale of load growth from data centers and AI compute. What used to be a long-term planning problem is now showing up in operators’ day-to-day reality.

From our vantage point working across utilities, engineering partners, and early reactor programs, the story is consistent: **the pressure on nuclear has never been higher, and the systems supporting nuclear, workforce, training, operations, documentation, aren’t keeping up.**

This is where AI stops being optional.

Not Silicon Valley AI. Not “innovation theater.”

But **nuclear-specific, regulated-environment AI** that accelerates licensing work, strengthens control-room decision-making, automates documentation, and gives the workforce the support it needs to operate safely under new conditions.

And this is exactly why RTS exists.

We’re not a technology vendor and we’re not a general-purpose consultancy. We’re the world’s only consulting firm built specifically for AI + Nuclear, designed by people who have operated plants, managed licensing cycles, supported outages, and built the training, O&M, and governance models utilities rely on.

As reactor projects advance, grid conditions tighten, and workforce shortages deepen, utilities need clarity, not guesswork. They need practical roadmaps, execution support, and AI strategies that respect nuclear’s regulatory reality.

If you’re shaping your 2026 strategy, the window is narrowing. The industry is moving, faster than many expected. Now is the moment to build the AI-enabled foundation that will carry nuclear through the next decade.

— The Raisun Founders

Ready to talk, let's meet.

Momentum in the Field

ANS | “The Progress So Far: Update on the Reactor Pilot Program”

ANS reported a meaningful update on the Advanced Reactor Pilot Program, reviewing siting progress, regulatory activity, and the operational readiness tasks utilities must complete before first concrete is poured. The underlying message: **we are moving forward—but not nearly fast enough to meet national demand.**

Sound like you? Let's Talk

Raisun Take:
This report highlights the tension we’ve been warning about: reactor technology is advancing faster than the supporting workforce, processes, and digital infrastructure.

We see the same pattern across utilities:

- Licensing groups overloaded with documentation
- Construction teams without digital support
- Training models that can't onboard or upskill fast enough
- Supply-chain partners drowning in qualification paperwork

Advanced reactors won't stall because the technology failed, they'll stall because the *people systems* around them can't scale.

This is exactly where AI becomes essential: digital twins to rehearse readiness, AI-enabled licensing support, automated documentation workflows, and adaptive training for a workforce that has to learn faster than ever before.

RTS is already building these capabilities with utilities preparing for SMRs and hybrid campuses.

Read the article

Utility Dive | “Constellation Looks to Demand Response to Accommodate Load Growth”

Constellation publicly addressed what nearly every utility is grappling with: load growth is hitting levels not seen in decades, driven primarily by data centers and AI compute.

Demand response is now a strategic necessity, not a programmatic add-on.

Raisun Take:
This article makes one thing clear: the grid profile is shifting faster than nuclear operations were built to handle.

This new load environment demands:

- Faster operational decision-making
- Smarter coordination between grid operators and plant operators
- Predictive maintenance to prevent unplanned downtime
- Higher flexibility even from baseload units

AI is the enabler of all four.

Utilities are discovering that without AI-supported control-room insights, real-time OE search, and automated reporting, their ability to respond to grid volatility is limited.

Constellation’s transparency is a signal: operators who modernize operational intelligence will manage the grid of the next decade; those who don’t will be outpaced.

RTS is helping operators build the AI-enabled operations model needed for this moment.

Read the article

RTS Research Brief | Nuclear Workforce Enablement Through AI

Read / Download the Report

Over the past two weeks, our inbox filled with the same question from utility leaders: “How are we going to staff what we’re building?”

Our new RTS research brief answers that question directly:

You won’t, unless AI accelerates training, knowledge transfer, and field enablement.

Raisun Take:
The industry does not have a workforce shortage, it has a **time-to-competency problem**. AI isn’t here to replace people, it’s here to **make the workforce viable at scale**:

- Adaptive training that cuts qualification time
- AI-powered knowledge capture before senior experts retire
- Multilingual field support for construction crews
- Digital assistants that reduce cognitive load on operators and engineers

This is why RTS built a field-first, training-first AI approach. And why our clients are using this report to shape their 2026 workforce and SMR-readiness strategies.

Download the Workforce Enablement Brief
It’s the strongest starting point for any utility asking serious questions about scale, staffing, and operational capacity.

Download the Report

The Raisun View

The last two weeks confirm the direction we’ve been pushing toward:

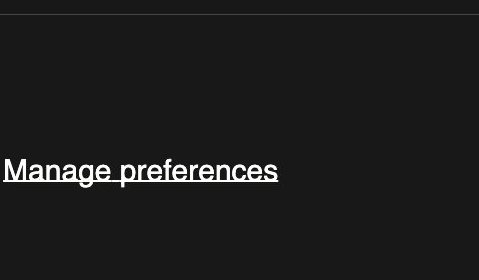
- **Reactor programs need digital and workforce modernization to stay on track.**
- **Major operators are acknowledging the scale of compute-driven grid stress.**
- **Workforce gaps remain the biggest threat to deployment schedules.**

AI isn’t a side initiative anymore, it is now a central operational requirement for nuclear’s future.

And RTS is the only consulting firm in the world built specifically to help nuclear leaders bring AI into real operations with compliance, safety culture, and engineering rigor baked in from day one.

If you’re ready to move from pilot conversations to a real AI roadmap, let’s talk.

Schedule a meeting, today!



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