The Risky Movement to Make America Nuclear Again

A Silicon Valley startup called Oklo is leading the charge to bring nuclear power back to the US with small reactors. Its backers have wealth and political connections that could undermine nuclear safety.

The site of Oklo's future Aurora Powerhouse near the Idaho National Laboratory.
Photographer: Natalie Behring for Bloomberg Businessweek

By Michael Riley, **Bloomberg**, October 30, 2025 at 9:00 AM UTC

When Oklo Inc., a nuclear power startup, applied in 2020 to operate its first reactor, the company rested largely on outsize ambition. Its MIT-educated co-founders, a married couple named Jacob and Caroline DeWitte, lived in a mobile home park in Mountain View, California, in space 38. Oklo, which had only 20 full-time employees, wanted to build small reactors across the country, transforming the way towns and industries are powered. To realize that dream, it needed the US Nuclear Regulatory Commission to say the company's design was safe.

Two years later, Oklo had failed to pass even the first step of the approval process. In 2022, after months of frustrating back and forth, the NRC concluded that the company didn't provide verifiable answers to the most basic safety questions. The regulator denied the application. A former senior agency official, who spoke on the condition of anonymity, says Oklo "is probably the worst applicant the NRC has ever had."

For Jake DeWitte, the denial was maddening. He still grows visibly agitated when recounting the moment. "They completely screwed up," he says. By the end, Caroline says, the agency "became kind of malicious, frankly."

In 2025, Oklo's reactor design is still unlicensed. But, in a sign of how radically the safety landscape has changed for nuclear power, the company's business promise seems bright. Oklo went public last year and now has a market value hovering around $20 billion. In May, Jake was in the White House when President Donald Trump signed four executive orders designed to herald a nuclear renaissance. "It's a brilliant industry," Trump said, DeWitte at his side.

Oklo CEO Jacob DeWitte, second from right, speaks in the Oval Office.
Listening are, from left, President Donald Trump, Interior Secretary Doug Burgum,
Defense Secretary Pete Hegseth and Scott Nolan, CEO of General Matter.
Photographer: Evan Vucci/AP Photo

The startup's backers long had a Plan B: If Oklo couldn't win approval from the agency charged with protecting the public from nuclear accidents, they would, essentially, go after the regulator, in much the way Uber Technologies Inc. and other Silicon Valley startups have obliterated regulatory roadblocks. One of the architects of Oklo's attack-the-regulator strategy is a law professor-turned-venture capitalist with ties to the Koch empire. He says the public shouldn't be worried.

The revival of nuclear power in the US has been predicted countless times since President Dwight D. Eisenhower's Atoms for Peace program rose from the ashes of Hiroshima and Nagasaki. This version, though, is something never before seen. Rather than huge power stations built by engineering companies for giant utilities, a new breed of nuclear startup wants to commercialize reactors, some so small they could be carried on semitrucks, so mighty they could power the hungriest of artificial intelligence data centers. Not one of these so-called advanced reactors has yet to be built in the US, but their promise has touched off a dealmaking frenzy, with backing from tech giants including Amazon.com, Google, Meta Platforms and Microsoft. The US Department of Energy has announced a goal of having at least three of these reactors switched on by July 4 of next year.

Oklo's power and influence in the MAGA era have let it seize the political moment

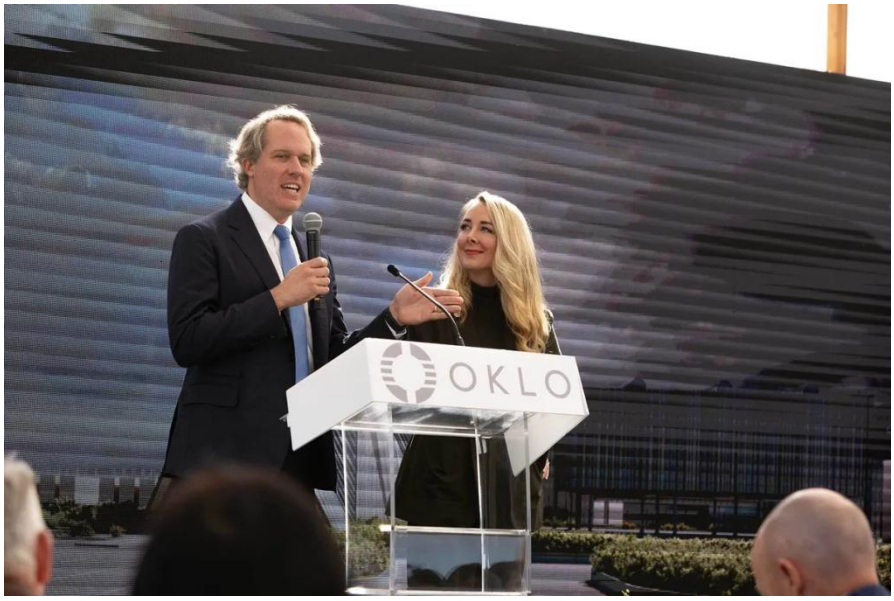
Oklo isn't the most obvious company of the two dozen or so newcomers to have broken through as a front-runner. Bill Gates' TerraPower LLC has been trying to develop an advanced reactor for almost two decades. Kairos Power LLC, backed by Google, has made quick progress through the government's licensing process.

But Oklo's power and influence in the MAGA era have let it seize the political moment. The company is backed by some of Silicon Valley's most important leaders, including Sam Altman, co-founder of OpenAI. A former board member is now Trump's secretary of energy. Critically, Oklo has capitalized on the deregulatory fever gripping Washington. The NRC, which became a target of Trump's Department of Government Efficiency, or DOGE, has lost at least 195 staff since January, and efforts to strip the agency of key powers are underway.

For a half-century, the NRC has been the watchdog of an industry built on some of the most dangerous technologies ever known. Yet Oklo and its backers say that its reactors will be so small and safe, little NRC oversight is needed.

Even a year ago, this proposition would have been absurd. Experts say advanced reactors are indeed safer in some respects: Because they're a third or less the size of traditional reactors and aren't cooled by water circulating under immense pressure, a serious accident is less likely to spread radioactive debris across a major populace. But for anyone nearby—workers operating the plant, say, or soldiers on a military base powered by one—the dangers could be substantial.

“All these nuke bros who know nothing about operating a reactor, they just want a free pass,” says Allison Macfarlane, former chairman of the NRC. “They can have their free pass, but then they will have an accident.”



Jake and Caroline DeWitte at the groundbreaking of their reactor site in September.
Photographer: Daniel V. Ramirez/EastIdahoNews.com

As he began his doctoral studies at the Massachusetts Institute of Technology in 2008, Jake DeWitte was determined to turn the nuclear energy industry on its head, even if he didn’t yet know how. Back then, plenty of academic departments at MIT churned out founders of wannabe unicorn startups in fields including biotech and materials science. But the nuclear science and engineering department didn’t typically encourage its students to think as entrepreneurs.

Housed in a 1940s-era building made of drab brick, the department fostered cutting-edge research. But in 2008, the most lucrative job for a nuclear engineering Ph.D. was at a big reactor company such as Toshiba Corp. or General Electric Co. That wasn’t innovation. It was keeping the lights on in a moribund industry that hadn’t built a new reactor in the US in more than a decade.

If there is such a thing as a “nuclear power family”—like a hockey or soccer family—Jake came from one. He was born and raised in New Mexico, a home of the Manhattan Project. His father, a senior manager at Sandia National Laboratories, oversaw the National Museum of Nuclear Science & History. He did internships at the lab in high school and says he had a top secret security clearance at age 16. On one vacation to the Grand Canyon, the family detoured to a nuclear power station so a young DeWitte could sit in the parking lot for an hour and marvel.

DeWitte went to the University of Florida to study nuclear engineering, running track as a freshman. “We’d be out partying all weekend, but Jake would still somehow find time to run hours of reactor design codes,” said Brett Rampal, a nuclear energy expert who has known DeWitte since college. Afterward, he headed to one of the country’s preeminent nuclear science programs at MIT as a Rickover scholar, his tuition and a living allowance paid by the Energy Department program.

Caroline grew up in Tulsa, Oklahoma. Her father, a physician, was what she describes as a whole-Earth “hippie-type” who didn’t run the air conditioner in Oklahoma’s swampy summers or let the family buy products in individual plastic packaging. “We were just very much thinking about that all the time,” she says. Caroline was studying economics and mechanical engineering at the University of Oklahoma when former Vice President Al Gore came to campus promoting his climate change film, *An Inconvenient Truth*. “That’s about when it began to crystalize for me that we’re losing ecosystems and that I wanted to be part of something that can change that.”

She abandoned plans for an advanced degree in mechanical engineering and applied to MIT’s nuclear science program. She originally focused on quantum computing but got interested in nuclear reactor design once she met Jake. (Caroline and Jake married while he was still in graduate school, and until recently she used her maiden name, Cochran.)

By the end of his second year at MIT, Jake had founded a student group to explore the idea of a nuclear startup. The six or seven students at its core dubbed it “Fantasy Baseball,” giving them an innocuous cover as they sought to change the world. Caroline was an original member.

One summer, while helping teach a popular three-week reactor technology course that MIT offered to utility executives, Jake talked to the leaders of America’s commercial reactor fleet about his ideas for building small, innovative nuclear reactors. None wanted to take the risk of actually building one, so the Fantasy Baseball crew began to think about other possible customers, such as remote villages in Alaska and mining operations in the high Andes. “We need to always think out of the box,” Jake wrote in an email to the would-be entrepreneurs in the summer of 2010.

Meeting in vacant classrooms over pizza and beer, the group made spreadsheets parsing reactor designs. Today 95% of nuclear plants are light-water reactors, which are cooled by hundreds of thousands of gallons of pressurized water. The grad students wanted to explore alternative reactor types, including one cooled with liquid sodium and another, developed at Oak Ridge National Laboratory in the 1960s, fueled by a molten sludge of uranium and salt.

Disagreements sometimes led to shouting. A student named Leslie Dewan, whose geeky charisma made her a natural to lead a hard-science startup, teamed with a West Virginia native named Mark Massie to pursue a molten salt reactor, eventually founding a company called Transatomic Power. Jake, Caroline and a third student became convinced that the best solution was a small sodium-cooled fast reactor. (Fast reactors use high speed neutrons to utilize more of the uranium core’s energy potential.) They initially christened their company UPower.

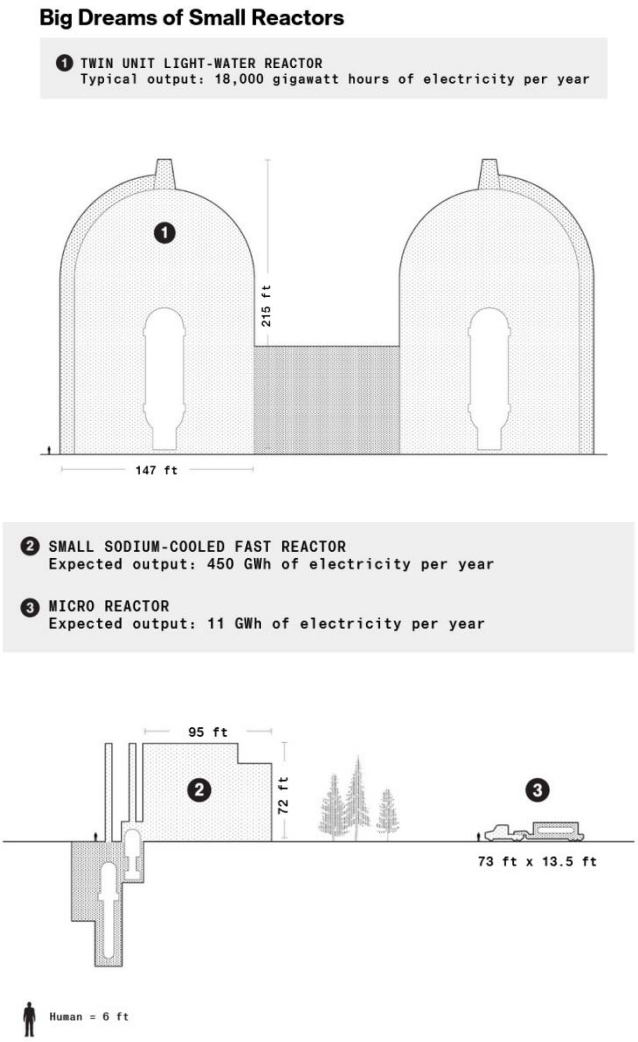


Illustration by Chris Philpot

It took Jake six years to complete his doctorate, and didn't always meet the program's demands, professors and colleagues say. Kord Smith, who taught DeWitte's nuclear fuel cycle class and is now emeritus professor of the practice of nuclear science and engineering at MIT, describes him as "the bottom-performing student in the entire class." He told *Bloomberg Businessweek*, "Jake has a million-dollar smile and a line of bullshit that never ends." DeWitte says that Smith's class "wasn't worth my time and effort." He adds that "if I didn't find value in a course, or a course wasn't well taught, I would do the bare minimum to get by."

After graduating, DeWitte reneged on his commitment as a Rickover fellow, a government scholarship program that required him to work for at least a year following graduation in one of the labs that develops the Navy's nuclear reactors. The program's administrators sued to recover the $350,000 they had paid for his education, plus the interest, pointing out in the complaint that they even provided an extra year of support because it took DeWitte longer than planned to complete his studies. The court documents don't indicate whether any money was recovered. He was the first MIT student ever to back out, according to several professors.

UPower got a slow start as DeWitte finished his Ph.D. and the team's third member left the startup. In the meantime, Transatomic became the first star of the new nuclear movement.

The high-desert site of Idaho National Laboratory,
formerly known as the Reactor Testing Station. *Source: Idaho National Laboratory*

Last October, the NRC commemorated its 50th anniversary with a gathering of agency staff and luminaries from the regulator's past. The event had a celebratory tone but also warnings not to forget the lessons of history. The NRC's predecessor, the Atomic Energy Commission, had lost the public's trust following the partial meltdown of a sodium-cooled fast reactor called Fermi 1, named after the legendary physicist Enrico Fermi, in 1966. The AEC's leadership had suppressed serious internal concerns about the safety of the reactor, which was located just 40 miles south of Detroit.

As both the country's primary promoter of nuclear energy and its arbiter of nuclear safety, the AEC had conflicting missions, Congress concluded. When President Gerald Ford signed the Energy Reorganization Act of 1974, the goal was to create an independent nuclear regulator, free from political interference, that would put safety above all else. During last year's commemoration, Victor Gilinsky, one of the NRC's first commissioners, remembered that as an AEC regulator, "you could not breathe the word 'accident' without saying 'highly improbable' in front of it." The chance of a serious accident had all but been ruled out in the AEC's licensing process, Gilinsky recalled. "My message is, be wary of sliding back into the AEC mode."

The NRC was initially supported by industry leaders, who hoped it would help usher in a nuclear energy boom—and in some ways, it did. There were around 50 operating plants when the agency started. Within 15 years that number had doubled.

What sometimes gets lost is how good the traditional nuclear industry became at operating plants based on light-water reactor technology

In 1979 a malfunctioning valve at Three Mile Island Nuclear Generating Station ended with the release of radioactive gases across the Pennsylvania countryside. It remains the country's worst nuclear accident to date. The NRC enacted tough regulatory changes, which some in the industry mark as the beginning of the end of nuclear power's golden age. As the cost of building plants began to rise, the promise of "energy too cheap to meter" became energy "too expensive to matter," in the words of one nuclear expert.

Tighter regulation intersected with another trend: big US infrastructure projects facing years of delay and massive cost overruns. The last nuclear reactors built in the US—Vogtle Units 3 and 4, on the Savannah River near Waynesboro, Georgia—came in more than double the original $14 billion cost estimate and seven years behind schedule. When Unit 4 finally began operating last year, many said it would be the last big nuclear power plant ever constructed in the US.

What sometimes gets lost is how good the traditional nuclear industry became at operating plants based on light-water reactor technology. The operating efficiency of the average US reactor rose from 60% in 1980 to more than 90% by 2001, and there have been no serious nuclear accidents in the US since Three Mile Island.

Left behind were alternative technologies. Those included sodium-cooled fast reactors such as the one Oklo wants to build. A different version of a fast reactor, known as a breeder reactor, produces fissile material, including plutonium, as a byproduct of the uranium fuel cycle. That material could in turn be recycled over and again as a fuel source. Perfecting this closed-loop fuel cycle became nuclear power's holy grail, because it would allow a single reactor to be fueled only once yet generate energy, essentially, forever.

Over many decades, fast-reactor technology proved tricky and often dangerous. The AEC had approved the construction of Fermi 1, the country's first and only commercial fast reactor, over the objections of its own Advisory Committee on Reactor Safeguards, which cautioned that there was insufficient evidence that the reactor could be operated safely. In 1984, after two decades of struggles, Congress pulled the plug on US efforts to develop a modern fast reactor. Japan spent years trying to get a fast reactor called Monju to work. Beset by sodium fires, the reactor produced only an hour of electrical power in the two decades prior to being shut down for good in 2016.

A 1975 book about the Fermi 1 meltdown, *We Almost Lost Detroit*, warned, "Nuclear power is an unforgiving technology. It allows no room for error. Perfection must be achieved if accidents that affect the general public are to be prevented."

In 2010, as the Fantasy Baseball crew argued over reactor designs, a nuclear engineer-turned-venture capitalist named Ray Rothrock appeared before a presidential commission to present his diagnosis for why nuclear energy had faltered in the US. Given Rothrock's status—he had made a fortune at Sun Microsystems and a second at Venrock Management LLC, a venture capital company started by the Rockefeller family—his analysis set the tone for nuclear energy's next big push.

The problem was regulation, Rothrock told the Blue Ribbon Commission on America's Nuclear Future. "The NRC today is viewed by venture capitalists as a 'just say no' organization," Rothrock testified. Venture capitalists had helped create stunning advances, commercializing everything from life-saving drugs to the internet, but for 50 years they had stayed away from nuclear energy: It was time for that to change, he said.

Rothrock would soon back Jake DeWitte's Fantasy Baseball rivals. And, almost overnight, Dewan, Transatomic's co-founder and chief executive officer, became the face of a new, hipper era of nuclear power. The company attracted marquee advisers and glowing media profiles. In the summer of 2013, the *New Yorker*, after describing Dewan's stylish black herringbone blouse, highlighted the Transatomic reactor's ability to consume used nuclear fuel and help solve climate change. Peter Thiel's Founders Fund was a major investor; Rothrock became chairman of the board.

That same spring, Jake and Caroline attended a screening near the MIT campus of the pro-nuclear film *Pandora's Promise*. At an invite-only dinner afterward, Jake was seated next to a young, wavy-haired investor, Sam Altman. Over courses sourced from local farms, the two clicked.

Back then, Altman, now CEO of OpenAI, was a Silicon Valley up-and-comer. In 2014 he took over Y Combinator, a startup incubator with three-month boot camps legendary among would-be founders. The incubator's biggest successes to that point had been software-based platforms—Airbnb, Dropbox, Stripe. Altman wanted to foster world-changing startups focused on hardware.

Say "hardware" to someone in Silicon Valley in 2014, and they'd likely think smartphones or virtual-reality goggles. But as Altman put together his first Y Combinator class that summer, he eyed one of the global economy's biggest markets. "If I could pick one thing to get done that I think would help the most people in the world, it would be very plentiful, safe, cheap energy," he told the *Silicon Valley Business Journal* on Y Combinator's 2014 Demo Day.

Jake and Caroline attended that summer's Y Combinator boot camp. Soon after, Altman invested personally in their company, which was eventually rechristened Oklo, after a region in Gabon that scientists say is the only known place on Earth where fission has naturally occurred. Although potential investors loved their vision, embedded in Silicon Valley's DNA was a basic notion that Altman evangelized: A startup, even a hard-science one, has to be able to bring its prototype to market quickly and make it cheaper than existing alternatives.

Between the lines of all the buzzy Silicon Valley-ese that summer was a warning: Nuclear energy and venture capital weren't a natural fit.

In March 2014—shortly before Jake and Caroline headed off to boot camp—their Transatomic counterparts, Dewan and Massie, published a white paper with some jaw-dropping claims.

Transatomic's molten-salt reactor could generate 75 times more electricity per ton of mined uranium than a traditional light-water power station, the white paper said. That would be like converting a Tesla to get more than 30,000 miles per charge. One version of Transatomic's design could operate solely on spent nuclear fuel, a potentially game-changing advance that would solve one of the industry's most vexing problems: the need to store its toxic byproduct over a timescale that could outlast humankind. Transatomic's claims helped raise the company's profile and produced an influx of investor money.

The white paper cited computer modeling and an internal analysis, but Transatomic didn't make the supporting data public. The founders said they needed to protect the company's intellectual property. By the fall of 2015, rumors were circulating among the country's top nuclear scientists about gaps in Transatomic's science. Even senior officials at the Energy Department privately expressed doubts.

The startup and MIT weren't officially connected, but prominent professors in the school's nuclear engineering department worried that its reputation was on the line. The department chair organized a working group led by Smith, the MIT professor known for his command of reactor physics.

The group's members were shocked at what they found. After meeting with Dewan and Massie over two days that December, the university's experts concluded that the startup had made basic errors in its computer modeling, problems that a nuclear engineering undergraduate "could find given the right guidance," according to department emails circulated at the time and seen by *Businessweek*.

On Dec. 18, 2015, Smith sent Transatomic's board a long letter detailing the group's findings. The startup had made a "poor choice of analysis tools and models," and was hiding behind intellectual property rights "to mask what I believe is outright technical incompetence," Smith's letter said.

Rothrock asked Smith to refrain from going public so the board could get independent confirmation, but it would be almost a year from those first meetings at MIT before Transatomic published a corrected white paper. Even then, in public remarks as late as November 2016 the company continued to suggest that its reactor could operate on spent nuclear fuel.

Smith sent a sharply worded email around that time to Rothrock, invoking an infamous blood-testing startup that had at one point been valued at $9 billion and had collapsed because of fraudulent claims about its technology. "I do not enjoy hearing colleagues draw parallels to the recent Theranos experiences," Smith wrote. Transatomic "is now 6+ years into this design and is moving at an incredibly slow pace in correcting the many incorrect claims that stemmed from its flawed original analysis."

The venture capitalist replied with a scathing email of his own. He reminded Smith that he had worked with more than 50 startups and that initial products—"version 1" in VC speak—often fall short of perfection. The main virtue of these companies is the founders' vision, which at the outset need not match reality. "They call it minimal viable product (MVP) for a reason," Rothrock wrote. "I do not agree with or understand your concern for this point."

Rothrock continued: "Finally, let me say that the rhetoric in your note of comparing Transatomic with Theranos is completely out of bounds, without merit or connection of any kind, and tragically disappointing to me. I don't know if you believe this or others believe this. Without a doubt, it is entirely inaccurate, inappropriate, and unacceptable."

The episode had badly damaged the belief that Silicon Valley could be trusted with nuclear energy's future

It would take another two years before Transatomic was finally shuttered. By then, the episode had damaged the belief that Silicon Valley could be trusted with nuclear energy's future.

Transatomic's collapse also left venture capital's tech titans looking for a new standard bearer in their drive to disrupt nuclear power.

In January 2018, some of the country's richest and most powerful descended on the desert resort town of Indian Wells, California, for three days of hobnobbing over canapés and golf. They had come for the annual donor retreat established by the chemicals-and-refining billionaires Charles and David Koch; before the weekend was out, they had pledged to spend more than $400 million to support the Kochs' political influence operation, which counted governors, senators and state legislative leaders as foot soldiers.

Among those attending was a law professor-turned-venture capitalist named Salen Churi. Co-founder of a new Koch-backed VC firm called Trust Ventures, Churi explained the firm's novel strategy as he worked the target-rich room for potential investors: identify startups facing steep regulatory challenges; solve them through litigation, advocacy and political influence; and then watch the profits roll in.

"Imagine a startup able to tap into the know-how of Koch from Day 1," Churi said, according to news coverage of his presentation. The company's first big investment, in mid-2018, was in Oklo. (Another investor in 2018 was Rothrock; he invested in Oklo around the same time that Transatomic folded.)

Venture capitalist and Oklo backer Salen Churi.
Photographer: Jared Siskin/Patrick McMullan/Getty Images

If Altman was the Platonic ideal of a Silicon Valley venture capitalist, Churi was an iconoclast. He grew up in Cincinnati, the son of an Iraqi refugee. His father was born in Baghdad but fled to Israel during the rule of Saddam Hussein, living in a tent city for much of his childhood. He met Churi's mother in New York City, and the couple relocated to Ohio.

Smart, with a relish for a brawl, Churi went to law school at the University of Chicago, practiced as a corporate attorney at Kirkland & Ellis, then returned as a law professor. Beginning in 2013, he was associate director at the university's Institute for Justice Clinic on Entrepreneurship, which received Koch funding. There he spearheaded a project to legalize the city's mostly immigrant street food vendors over the opposition of local restaurants.

A former frat buddy of Churi's was one of the first employees at Uber. Churi remembers telling him that ride-sharing would never work; all-powerful taxi commissions and restrictive local regulations would snuff out the company before it could ever start. "They're all billionaires now, and I'm not," Churi quips during an interview in a gated community of mountain lodges near Park City, Utah, where he has a home.

That experience sparked Trust Ventures. Most people told Churi it wasn't wise to invest in companies with regulatory challenges. The exception was Chase Koch, scion of the Koch family's empire. Koch and the family's libertarian funding group, Stand Together, agreed to back Churi's idea, giving him entrée to the family's donor and political network.

Uber deployed lawsuits and regulatory assaults so regularly that the serial entrepreneur Michael Burtov said in 2023 that hailing an Uber amounts to hiring a law firm "that just happens to have an independent-contractor driver nearby." Its army of lobbyists and aggressive political maneuvering cowed politicians from New York City to New Delhi. The company's playbook inspired a new term: "regulatory entrepreneurship."

In trying to apply that model across industries, Churi built a company that has little in common with a traditional VC operation. Rather than hiring mainly MBAs, Trust Ventures is stacked with lawyers. Churi and his team devote much of their time to dissecting regulations, looking for loopholes.

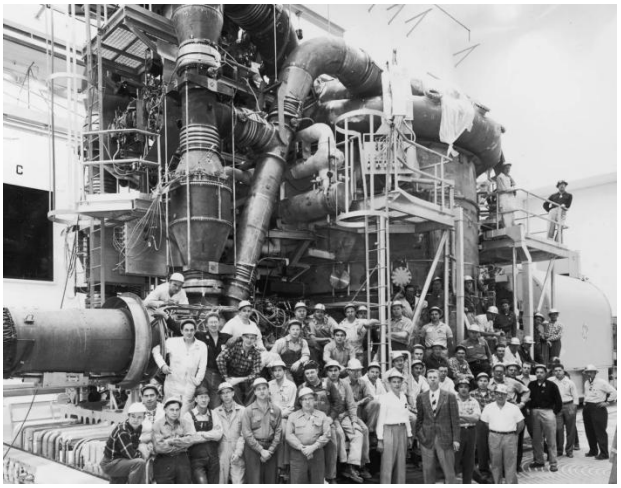
Oklo was an edgy choice as Trust Venture's first big investment. To succeed, Churi wouldn't be rolling a local taxi commission but a federal agency tasked with preventing a nuclear accident.

To complete the picture, Churi added one more element. Any direct attack on the NRC was risky for Oklo, which might still need the agency to approve its reactor. So most of what Trust Ventures did remained in the shadows.

The dome of the decommissioned Experimental Breeder Reactor-II.
Photographer: Natalie Behring for Bloomberg Businessweek

Eighty feet high and fashioned from 1-inch-thick steel plating, the shiny silver dome of the Experimental Breeder Reactor-II rises from the eastern Idaho sagebrush like a lost artifact of the Atomic Age. At one point, 52 test reactors of various types operated on this stretch of high desert.

It’s the home of the Idaho National Laboratory, formerly known as Argonne-West, where nuclear power was born.



An experimental nuclear aircraft engine at Idaho National Laboratory, from the late 1950s.*Source: Idaho National Laboratory*

Nowadays, scientists, government officials, tourists and others have turned this site into a pilgrimage. (The filmmaker Oliver Stone paid a visit not long ago.) Some of them come to see or learn from the Experimental Breeder Reactor-II, or EBR-II, a sodium fast reactor that is considered by many to be the lab’s most successful attempt to revolutionize the way nuclear energy is created.

There’s a renewed belief that this long-forgotten technology—EBR-II was built six decades ago and decommissioned in the mid-1990s—holds the keys to a safer, more efficient nuclear industry. Adherents argue that the technology, unlike other reactors, is “passively safe”—so safe that in even some of the worst accident scenarios, a sodium fast reactor would shut down without human intervention.

Not far from the massive silver dome is a patch of government land where the DeWittes have staked their future. Little more than a sign and a couple of porta potties stashed amid the juniper bushes, this is where the two are planning to build Oklo’s reactor, Aurora, which they’ve described as a more modern version of the EBR-II. They have vowed that their reactor will share the same inherent safety characteristics.

The Aurora Powerhouse site.*Photographer: Natalie Behring for Bloomberg Businessweek*

Edwin Lyman, a physicist and director of nuclear power safety with the Union of Concerned Scientists, says the assumption that reactors like EBR-II are “passively safe” is misguided. “It’s gaslighting,” he says. Sodium fast reactors are notoriously difficult to operate, which accounts for the technology’s long history of accidents and meltdowns. Sodium leaks can create fires that spray a

toxic sodium-oxide aerosol into the air. If the coolant comes into contact with water, hydrogen explosions can result in both the reactor itself and the power generation plant. And compared with light-water reactors, fast reactors leak neutrons that need extensive shielding to make them safe. “If something goes wrong, the potential for a Chernobyl-like escalating event is actually much higher than it is with light-water reactors,” Lyman says.

When Oklo submitted its first application to the NRC in 2020, the agency was under pressure from Congress and the industry to show it could license new reactors more efficiently. The agency’s licensing team was eager to begin what it called a Phase 1 review—essentially checking that the application is complete enough to move to a more rigorous scientific and safety evaluation. With an experienced company, Phase 1 usually takes about two months. “We thought we could get Oklo to that point in about six months,” says a former agency official familiar with the company’s application, who asked for anonymity to talk openly about the company’s application.

As the licensing team dug in, Oklo couldn’t provide the supporting analysis for many of its basic safety assumptions

Major sticking points soon emerged. The company declared that, based on its extensive calculations, Aurora was one of the safest nuclear reactors in the world and there was no plausible accident that would result in a release of radiation into the environment. Yet the NRC staff identified important scenarios that Oklo didn’t appear to consider: What if undulating pipes from a sudden leak wrecked key systems? What if the seals of the reactor capsule failed, creating a pathway for radiation to reach the outside? The regulators also asked about the risk of flooding inside the reactor capsule, which the NRC said “may represent a potential criticality issue.” Nuclear experts say that’s a technical way of saying that the agency was worried about the possibility of an uncontrolled fission event, which could result in a dangerous steam explosion inside the reactor vessel.

As the licensing team dug in, Oklo couldn’t provide the supporting analysis for many of its basic safety assumptions, according to four officials who spoke to *Businessweek* about the application, as well as public NRC documents. In some cases, supporting files the company claimed to have were not available when the NRC tried to examine them, one official says.

“We needed the evidence that this reactor could be built and operated safely, and it just wasn’t forthcoming,” says one of the four officials.

Finally, in January 2022, the NRC denied Oklo’s application. By that point, the company had raised more than $25 million, and its dream of mass producing small nuclear reactors had seemed in reach. But at the NRC, the company never made it beyond Phase 1.

In a flashy video posted on YouTube last year, the DeWittes, clad in jeans, stroll across the high prairie near the Idaho National Laboratory. They’re introduced by a narrator whose tone mixes soothing and serious. “Meet the husband-and-wife engineering duo that discovered a game-changing technology buried in a government lab in Idaho,” the narrator says.

The six-and-a-half-minute video was published on the YouTube channel of a Utah-based organization called the Abundance Institute, identified on its website as “a mission-driven nonprofit focused on creating a space for emerging technologies.” In contrast to other pro-nuclear outfits including Third Way and the Breakthrough Institute, the Abundance Institute has been ferocious in its criticism of the NRC. In January its CEO penned an op-ed in the *Wall Street Journal* that labeled the regulator “lawless,” then followed up with social media posts declaring that it was time to abolish the agency.

What the videos and op-eds don’t disclose is that the Abundance Institute is Churi’s brainchild. He’s a co-founder and is listed as the institute’s treasurer in papers filed with the Utah secretary of state’s office. The same papers list, as an institute director, Derek Johnson. He’s a central player on the Kochs’ national political team and executive vice president at the Kochs’ umbrella group, Stand Together, which also published the Oklo video.

Churi says he got the idea for the Abundance Institute in May 2023 while watching a congressional hearing about regulating artificial intelligence. He wanted it to be an advocate for nascent industries that could benefit the world but were at risk of being derailed by government intervention.

“The people who get one-cent electricity from nuclear don’t exist yet because we can’t give it to them yet,” Churi says. “We wanted to be the lobbyist for companies that don’t exist yet and for consumers who haven’t gotten the benefit of those technologies yet.”

The institute is so intertwined with the Koch family’s famed influence network that it’s hard to distinguish between the two. Many of its key employees, including the CEO, come from the Center for Growth and Opportunity at Utah State University, sometimes called “Koch U of the West,” a reference to a similar Koch-funded outfit at George Mason University in Virginia. Churi listed CGO’s offices as his address in papers that the Abundance Institute filed with the state. (Christopher Koopman, the institute’s CEO, called that a “clerical error.”)

Emails and other documents obtained through public records requests show that the Abundance Institute effectively serves as a front for Churi’s attack-the-regulator mission. As his team dissected federal regulations, Churi spotted language that might offer an opening. In 1956 the Atomic Energy Commission determined that because any apparatus designed to carry out a nuclear fission chain reaction can affect the health and safety of the public, it needs a federal license. Nuclear startups could argue that their reactors are so small and safe that they don’t present any risk to the public—and therefore fall outside federal jurisdiction. It was a long-shot position on the science, but the right court might just buy it. Churi and the team went to work.

They began looking for a nuclear startup willing to be the public face of the challenge. And, because a major goal of the lawsuit was to shift oversight of small nuclear reactors from the NRC to the states, they recruited state attorneys general as lead plaintiffs.

For the first, they linked up with Bret Kugelmass, founder and CEO of Last Energy Inc., which boasts a reactor design using off-the-shelf components. Kugelmass has little to no experience in nuclear engineering—his last company used drones to map farmland—but he has a popular energy podcast and is close to the MAGA movement. One Oklo investor called him “like Elon in his take-no-prisoners approach to getting stuff done.”

For the second, Churi and the Abundance Institute targeted officials in Texas and Utah, two states where Churi spends much of his time and knows, he says, “a lot of folks who work in both politics and the AG offices.” In Utah, the Abundance Institute served as a conduit to those officials, leveraging the Koch family’s political clout as well.

According to emails obtained by *Businessweek* through a public records request, Utah Senate President J. Stuart Adams and an aide met with Abundance Institute staff in the fall of 2024. Afterward, the aide wrote Utah Chief Deputy Attorney General Dan Burton, saying the institute was “gathering clients for a nationwide lawsuit against the NRC.” Then he added, “We think it would be worth you/the AG’s time to explore their proposal and determine whether it makes sense for Utah to join.”

Eli Dourado, the Abundance Institute’s chief economist, prodded Burton again right after Thanksgiving: “Texas is officially on board. Would love to have Utah as well!” Within a few weeks, they did.

Churi declined to comment on the emails. Oklo said in a written statement that “our investors, including Trust Ventures, are disclosed in our public filings. Questions about a nonprofit’s disclosure or governance practices are best directed to that organization.” Koopman said the institute has “always been excited to point potentially interested parties toward the opportunity” of suing the NRC but had “no formal role” recruiting the plaintiffs.

As the team prepared to file its federal lawsuit, a second and potentially more direct path to gutting the NRC opened up. The country had just voted to send Donald Trump back to the White House.

In February 2023, Jake DeWitte flew spur of the moment to Denver in hopes of buying a Kia Telluride he’d found online. His trip changed the future of the company.

Denver happened to be the home base for Chris Wright, founder and CEO of the second-largest fracking company in North America, Liberty Energy Inc. A graduate of MIT, like the DeWittes, Wright once famously drank fracking fluid to prove it was safe. He had recently met with an Oklo representative and gushed about the company, intrigued by the possibility of using small nuclear

reactors to power Liberty's gas drilling operations. The representative set up drinks for Wright and DeWitte, and by the end of the evening, Wright was ready to invest.

The timing was propitious, and not only for Oklo. The buy-in—structured as a $10 million strategic investment by Liberty—was finalized just weeks before an announcement in June that one of Altman's companies, a special purpose acquisition company (SPAC), would take Oklo public. Jake says Oklo extended its last VC round to allow Liberty to get in under the wire, making Liberty one of the last early investors before Oklo began trading on the New York Stock Exchange the following year, with an initial valuation of $850 million.

Wright is a unique figure in the country's oil and gas industry. Known as one of its intellectuals, he penned long missives expressing his skepticism of climate change's importance and ruminating on America's energy future, often publishing them as official Liberty reports. He was also close to natural gas magnate Harold Hamm, known as Trump's energy whisperer. Wright served as a director of the Domestic Energy Producers Alliance, a group co-founded by Hamm that embraces climate change doubters, wind-turbine haters and deregulation.

In April 2024, Hamm organized the now famous gathering at Mar-a-Lago in Florida where Trump asked oil and gas executives to donate $1 billion to his campaign, promising, in exchange, to gut federal regulations governing their industry. Wright spoke at the event and impressed Trump, who told associates afterward that Wright could be his energy secretary, according to a *Wall Street Journal* account. That same month, Wright was elevated to Oklo's board of directors, Wright's financial disclosures show.

Jake DeWitte credits Hamm as key to getting Wright on the short list for the cabinet position following Trump's election victory, something others confirm. In mid-November, Trump officially announced Wright's nomination. Following his confirmation, Wright sold his ownership stake in Liberty and relinquished the unvested Oklo shares he received as a board member.

Meanwhile, Trump began a slash-and-burn campaign to hollow out federal regulators

In his first departmental directive, issued in early February, Wright declared that "the long-awaited American nuclear renaissance must launch during President Trump's administration." The directive said that the Energy Department would work to enable the "rapid deployment" of next-generation nuclear technology.

Oklo said in a written statement that it "has worked closely with both Democratic and Republican Energy Secretaries, underscoring cross-administration recognition of Oklo's leadership in advanced nuclear technology." Responding to questions from *Businessweek*, an Energy Department spokesman says that "Secretary Wright remains in compliance with all ethics and financial disclosure requirements" and that Wright "recused himself from meetings and decisions specifically related to Oklo."

Meanwhile, Trump began a slash-and-burn campaign to hollow out federal regulators, including nominally independent agencies such as the Securities and Exchange Commission and the National Labor Relations Board. By April, drafts of four executive orders targeting the regulation of nuclear energy began circulating.

Typically, such draft orders get disseminated among government experts and relevant agencies as they are reworked and refined over weeks, even months. But one top Energy Department nuclear scientist, whose expertise is directly relevant to the executive orders, didn't see them until after they had been signed, the scientist told *Businessweek*.

One person who did get input on the orders, by her own account, was Isabelle Boemeke, a Brazilian model and self-described nuclear energy influencer who goes by the moniker Isodope. Author of a book on nuclear power titled *Rad Future*, Boemeke is famous for mobilizing her social media followers in a successful drive to keep the Diablo Canyon nuclear power plant north of Los Angeles operating beyond its scheduled retirement. She's also the spouse of Joe Gebbia, one of the founders of Airbnb and a prominent DOGE figure.

Churi was busy helping to influence the direction of the executive orders as well. He declines to say whether he spoke directly with Wright about them, but “what I can say is that a lot of the ideas that are in the [executive orders] are things that we have advocated for a long time.”

When Churi dreamed up his strategy in 2018, vanquishing the NRC seemed a long shot. The agency, designed by Congress to be insulated from political meddling, is overseen by five independent commissioners appointed by both Republican and Democratic presidents. By May, that framework had begun to crack.

The federal lawsuit against the NRC was filed in December, with Texas and Utah as lead plaintiffs. By March the NRC had responded with a strongly worded motion asking the court to dismiss the lawsuit.

Behind the scenes, something very different was happening. At the end of April, the plaintiffs’ lead lawyer, a partner at the boutique firm Boyden Gray named Michael Buschbacher, emailed his colleagues with good news. The NRC was ready to discuss a settlement and potentially agree to the plaintiffs’ biggest demand: the initiation of a rule-making process with the goal of exempting some small nuclear reactors from traditional NRC oversight and handing it to state agencies instead.

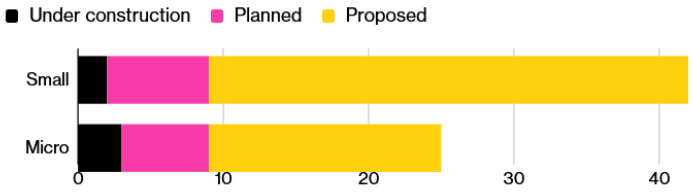
The NRC’s apparent willingness to suddenly cede its authority was passed on by a Department of Justice lawyer named Chuck Roberts, identified by Buschbacher as “the new DOJ political assigned to the case,” according to emails obtained by *Businessweek*. In Justice Department parlance, that’s a reference to an administration appointee assigned to a high-profile case to look after the interests of the department’s senior leadership.

“The good news is that Chuck informed me that he does think that NRC will be able to give us what we’ve asked for,” Buschbacher wrote on April 28. “He thinks they will agree to meet our first settlement demand of promulgating a new rule and that our requested timeline of 18 months is doable.” (The final terms of any settlement are still under discussion and could change, a person familiar with the case said. The DOJ did not respond to a request for comment about the settlement talks and Roberts’ role.)

Meanwhile, the startups have another pathway to get their reactors to market quickly. In August, the Department of Energy announced a pilot program with the goal of deploying at least three untested reactors by next July 4, to coincide with the 250th anniversary of the signing of the Declaration of Independence. Oklo plans to license its first Aurora reactor through this program, the company says, although its reactor won’t be ready by then.

The New Nuclear Landscape

Next-generation small and micro reactor projects in the US



Source: Nuclear Energy Institute figures retrieved on Oct. 24

Note: A proposed project is one for which a reactor developer, government agency or other potential owner has proposed one or more reactors at an estimated site or identified a reactor design. Planned projects are in more formal development and may be a part of a public integrated resource plan or have suppliers contracted.

The company says it still plans to license future reactors via the NRC, but it will benefit from a radically changed agency. The executive orders signed in May push the agency to approve new reactor licenses within18 months and to further expedite approval for any power plants already OK’d by the Defense Department or the Energy Department, two entities that have never licensed a commercial reactor. The NRC’s Advisory Committee on Reactor Safeguards, a panel of experts who weigh in on safety issues posed by new designs, had its remit pared back to the “minimum necessary” required by law.

A souvenir from small-reactor startup Valar Atomics
Photographer: Joyce Lee for Bloomberg Businessweek

In May, the White House assigned a DOGE representative named Adam Blake, a venture capitalist with a background in housing development, to the regulator. After a series of meetings with top agency officials, both the NRC's general counsel and its executive director of operations were pushed out, two people familiar with those moves said. Trump fired one commissioner in mid-June, and a second resigned a few weeks later.

Blake has told several NRC leaders that he sees it as part of his job to facilitate a settlement in the December lawsuit, two people familiar with the conversations said. Assisted by at least six other DOGE hands, Blake is also directing an effort to slash NRC regulations, partly with the help of an AI tool. At a recent meeting with NRC employees, DOGE representatives handed out black ballcaps emblazoned with "Make Nuclear Great Again" alongside the logo for another nuclear startup, Valar Atomics, according to a former agency official familiar with the meeting.

A separate effort by the US Office of Personnel Management has proposed converting as many as 300 of the top technical staff at the agency to at-will employees, a move that could further politicize the NRC's licensing process, according to a person who has seen the draft plan. At a recent Senate hearing, Commissioner Matthew Marzano, a Biden appointee, said he thought it was possible he could be fired for making a safety call that the White House disagreed with.

"One reason Fukushima happened is because Japan had a regulator that was ineffectual," says Scott Morris, who until June was deputy executive director for operations at the NRC, one of at least a dozen senior leaders to have left the agency since January. "That's where this story ends if you don't have a credible, viable, independent regulator."

The DeWittes (far left) at the groundbreaking for their reactor.
Photographer: Daniel V. Ramirez/EastIdahoNews.com

By this summer, it was clear that Churi and his team had won, and not only for Oklo. Their efforts have created an opening that other nuclear startups—and their Silicon Valley backers—can now draft behind. One of those companies, Deep Fission, plans to operate small nuclear reactors a mile underground, a concept that's never been tried anywhere. Valar Atomics, which joined the lawsuit against the NRC in April, claims on its website that you can safely hold spent nuclear fuel from its reactor for five minutes in the palm of your hand—something that nuclear experts say would quickly kill anyone who tries it. Both companies were also recently chosen for the Energy Department's new accelerated licensing program.

"One of the most exciting things about the [executive orders] is that they really beat some additional paths to get these things to market quickly," Churi says.

In the days after Jake DeWitte stood in the Oval Office and watched Trump sign the four executive orders, Oklo's market value surpassed $8 billion. In mid-October, a few weeks after the company broke ground on the site of its still-unlicensed reactor, Oklo's value briefly topped $25 billion. Churi says Trust Ventures sold some of its shares but still holds a stake. He won't say how big, but he did say its value has grown by more than 100 times. The DeWittes, who didn't leave their double-wide trailer until last year, recently bought a $3 million home. They have a net worth around $1.5 billion, each.

—With Margi Murphy

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