

2 interpretation, underviews, & case

We affirm.

Interpretation

Debaters must disclose all broken non-identity based topical constructive positions at the tournament at which they are competing open source twenty minutes before the round on the 2024-2025 NDCA PF Wiki

Violation

They didn't disclose. Screenshots prove

A screenshot of a web page titled "Potomac Debate Academy" showing a list of teams. The page has a header "Team 8" and a list of 20 teams, each with a name and a list of members. The teams are: Potomac Debate Academy 81 Team, Potomac Debate Academy 82 Team, Potomac Debate Academy 83 Team, Potomac Debate Academy 84 Team, Potomac Debate Academy 85 Team, Potomac Debate Academy 86 Team, Potomac Debate Academy 87 Team, Potomac Debate Academy 88 Team, Potomac Debate Academy 89 Team, Potomac Debate Academy 90 Team, Potomac Debate Academy 91 Team, Potomac Debate Academy 92 Team, Potomac Debate Academy 93 Team, Potomac Debate Academy 94 Team, Potomac Debate Academy 95 Team, Potomac Debate Academy 96 Team, Potomac Debate Academy 97 Team, Potomac Debate Academy 98 Team, Potomac Debate Academy 99 Team, and Potomac Debate Academy 100 Team. The members listed for each team are: 81 Team: [Name], 82 Team: [Name], 83 Team: [Name], 84 Team: [Name], 85 Team: [Name], 86 Team: [Name], 87 Team: [Name], 88 Team: [Name], 89 Team: [Name], 90 Team: [Name], 91 Team: [Name], 92 Team: [Name], 93 Team: [Name], 94 Team: [Name], 95 Team: [Name], 96 Team: [Name], 97 Team: [Name], 98 Team: [Name], 99 Team: [Name], and 100 Team: [Name].

Team 8
Potomac Debate Academy 81 Team
Potomac Debate Academy 82 Team
Potomac Debate Academy 83 Team
Potomac Debate Academy 84 Team
Potomac Debate Academy 85 Team
Potomac Debate Academy 86 Team
Potomac Debate Academy 87 Team
Potomac Debate Academy 88 Team
Potomac Debate Academy 89 Team
Potomac Debate Academy 90 Team
Potomac Debate Academy 91 Team
Potomac Debate Academy 92 Team
Potomac Debate Academy 93 Team
Potomac Debate Academy 94 Team
Potomac Debate Academy 95 Team
Potomac Debate Academy 96 Team
Potomac Debate Academy 97 Team
Potomac Debate Academy 98 Team
Potomac Debate Academy 99 Team
Potomac Debate Academy 100 Team

Standards

1. Evidence Ethics: Disclosure is the only way to verify that cards aren't miscut or highlighted or bracketed unethically b/c prep time isn't enough. Ethics controls fairness, we can't have a fair debate against falsified evidence. Ethics is also key to education, more peer review means debaters will cut higher quality evidence and research more.

2. Reciprocity: They are able to prep me out which creates a massive in round skew in ability to engage and readiness which is a comparative advantage. The judge can resolve 100% of out of round abuse but has the UNIQUE scope of solvency to rectify the abuse in this round.

3. Cross-pollination — Debaters can use and modify the best ideas from each other's disclosed cases, leading to development of the best version of the argument. Yes, people will steal cards, but that's good because it already happens within large schools but by allowing small schools to steal from big schools we level the playing field.

Interpretation: When introducing evidence [in constructive], non-disabled varsity level debaters must read verbatim from cut cards. We can clarify interp questions.

Violation: They paraphrase, look at the last evidence they read as an example. They can't send full cut cards either and add warrants to their cards. Half their cards weren't even sent.

2 Standards

- 1. Spinning evidence – Paraphrasing incentives teams to spin evidence for a strategic edge, enabling unfair infinite arguments without true warrants, while we only have topic literature.**
- 2. Time skew – Paraphrasing is unfair as it forces us to use more prep time and takes longer to read through the parts they paraphrased, reducing our in-round strategy prep.**

D. Voters

A) Education – it's the value we get out of rounds. Killing education kills the point of the activity.

B) Fairness - Unfair arguments arbitrarily skew your evaluation of the round towards the unfair debater, and all arguments presume fair evaluation of those arguments

Vote for us to

- a. Set a precedence of better norm**
- b. Deter future abuse**
- c. Rectify the time skew for reading theory and being skewed out of substance.**

Default to competing interps. 2 warrants

- 1. Intervention – Reasonability is arbitrary and forces judges to insert their own opinions instead of evaluating who did the better debating.**
- 2. Consistency - Every judge has extremely different views on what is “reasonable”.**

NO RVIS; 3 warrants:

1. **Debaters bait and prep out theory creating infinite abuse and stopping clash.**
2. **People won't call out abuse in front of good theory debaters due to fear of losing.**
3. **You don't win for following the rules**

The must respond to all of this in the next speech or its conceded: two warrants

1. **Time skew: We can't frontline until summary and we're skewed 9:5**
2. Predictability - if they don't respond in 2nd constructive, they can dump on new DAs and counterinterps and we don't know what they're going for.

Go to case

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Potomac Debate Academy

Washington, DC 20002

Team 8

Potomac Debate Academy All Teams
 Potomac Debate Academy Novices
 Potomac Debate Academy Girls (Andrew De - Karlin Zhang)
 Potomac Debate Academy Girls (Paul Gao - Angela Wang)
 Potomac Debate Academy Girls (Hiroshi Ogino - Sam Smith)
 Potomac Debate Academy Girls (Sofia Sullivan) - Anna Kharin
 Potomac Debate Academy Girls (Shuang Lin - Paige Leung)
 Potomac Debate Academy Girls (Dawn Kuo - Karli Gurevitz)
 Potomac Debate Academy Girls (Samuel Kim - Dawn Kuo)
 Potomac Debate Academy Girls (Anthony Lee - Yoon Nam)
 Potomac Debate Academy (Joey Preston - Lee - Doug Lee)
 Potomac Debate Academy (Lillian Lu) - Katherine Lee
 Potomac Debate Academy (Joey Shattuck) - Cole - Niall McDermott
 Potomac Debate Academy (Katie Doyle) - Katie - Jack Kowalski
 Potomac Debate Academy (Katie Doyle) - Britt - Britt
 Potomac Debate Academy (Katie Doyle) - Britt - Britt
 Potomac Debate Academy (Mikayla Simon - Sarah Simon)
 Potomac Debate Academy (Wendy Heng) - Wendy - Britt
 Potomac Debate Academy (Wendy Heng) - Wendy - Britt
 Potomac Debate Academy (Zach Zeng) - Anne Zeng

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Go to case

C1 is Space Disaster (:30)

Trump's going to Mars

Greenfieldboyce 25 [Nell Greenfieldboyce, NPR science correspondent & Masters of Arts degree in science writing, 2-12-2025, Is Trump the president who will truly set a course for Mars?, NPR, <https://www.npr.org/2025/02/13/nx-s1-5294575/president-trump-elon-musk-mars-moon>, Willie T.]

Back in 1969, Robert Zubrin remembers watching the first moon landing when he was a teenager. He says if someone back then had asked him to predict when astronauts would walk on Mars, "my guess would have been the early 1980's." "And, in fact, NASA had plans to do that at that time, which were aborted by the Nixon administration," says Zubrin, an aerospace engineer who is president of the Mars Society and author of The Case for Mars. Over the decades, as administrations have come and gone, presidents have repeatedly promised future missions to Mars, holding this up as a key goal for human space exploration. Never before, though, has a president had such a close relationship with a would-be Mars colonizer, one who has transformed the world of rocketry. Elon Musk, President Trump's ally who is shaking up government agencies, founded the company SpaceX with the goal of making humans a multiplanetary species. In addition to ferrying astronauts to orbit for NASA, this company is currently building and test flying a new space vehicle,

Starship, that's designed to transport massive amounts of cargo—including people—and land on Mars.

"This is quite a singular moment for the prospects of getting to Mars," says Zubrin, who sees this as a time filled with both opportunity and peril. "I think it actually is pretty clear right now that we're going to get a humans-to-Mars

program started" he says. But to succeed, any such plan would need broad political support, and he worries about Mars suddenly becoming a divisive,

partisan issue. "This is not going to work," says Zubrin, "if this is understood to be an Elon Musk hobbyhorse." The presidents and Mars In his inaugural

address in January, President Trump got the attention of the space community when he said the

United States would "pursue our manifest destiny into the stars, launching American astronauts to

plant the Stars and Stripes on the planet Mars." In some ways, a president inspirationally referring to Mars is nothing new. Back in

1989, for example, President George H. W. Bush called for a return to the moon, to be followed by "a journey into tomorrow, a journey to another planet: a manned mission to Mars." He envisioned footprints in the Martian dirt by 2019, the 50th anniversary of the moon landing. "Within a few short years after President Bush's Kennedy-esque announcement, however, the initiative had faded into history," one policy analyst wrote. A decade and a half later, President George W. Bush refocused NASA on a return to the moon by 2020, adding that "with the experience and knowledge gained on the moon, we will then be ready to take the next steps of space exploration: human missions to Mars and to worlds beyond." President Obama told NASA to forgo the moon, but did maintain Mars as a goal: "By the mid-2030s, I believe we can send humans to orbit Mars and return them safely to Earth," he said in a speech at NASA's Kennedy Space Center. "And a landing on Mars will follow." First, the moon? During President Trump's first administration, he issued a space policy directive that refocused NASA on a human moon landing, with missions to Mars added as a future goal. That program, called Artemis, is what NASA has pursued ever since. It continued under President Biden, although it's been criticized as relying on a super-expensive rocket that rarely flies. Despite delays and cost overruns, NASA says it

is poised to send humans to orbit the moon next year. A landing is planned for the year after that.

Trump's reference to Mars, but not the moon, in his inaugural speech had some in the space community wondering if this was a result of Musk's influence. The new Trump administration could kill Artemis and its lunar plans, but Casey Dreier, chief of space policy for the Planetary Society, says that would be "strange in the historical sweep of things" given that the first Trump administration basically created this program "There's a lot of good reasons to still go to the moon, one of which is that the U.S. has made a commitment to not just its allies, but to the broader commercial space and business community here in the country," notes Dreier. Still, he thinks that the current administration might challenge NASA to really

nail down how the space agency will move from lunar exploration to a Mars mission. More difficult than the

moon NASA has a "Moon to Mars Program Office," notes Dreier. He thinks, however, "there's no 'to Mars' part of it. It's all 'to moon.'" He says NASA has constrained budgets, and there's always been concerns that the agency hasn't had enough resources to pursue both the moon and Mars. "It's hard to express verbally, I think, how much harder Mars is than the moon and how different it is," says Dreier. A trip to the moon takes just three days. Going to Mars, in contrast, takes months—one way. Recently, a NASA program aimed at retrieving pristine rocks from the surface of Mars and bringing them back to Earth ran into real trouble, as costs ballooned by billions and the mission timeline slipped. One decision the Trump administration will have to make is whether, and how, to pursue this science mission. Dreier says in terms of human exploration, NASA needs to lay out how its lunar activities

will actually help get the agency closer to going to Mars. "That is the key reframing that could help the

long-term exploration program be more efficient and effective," he says. President Trump's pick to lead NASA is Jared

Isaacman, a private astronaut who flew to orbit twice in SpaceX vehicles and completed the first commercial extravehicular activity, or spacewalk. He has yet to be confirmed. A NASA spokesperson told NPR in an email that the agency is "looking forward to hearing more about the Trump Administration's plans for our agency and expanding exploration for the benefit of all, including sending American astronauts on the first human mission to the Red Planet." A non-partisan

planet Because of the way the planets align, potential launch windows to Mars open up in 2026 and

2028. Musk has publicly stated that he's aiming to send Starship to Mars as soon as next year. Starship has

yet to reach orbit, but Zubrin thinks it's possible that an uncrewed Starship might land on Mars by 2028.

Nuclear is key but investment is needed.

Nguyen 20 [Tien Nguyen, Ph.D. in Organic Chemistry & B.S in Chemistry with Minor in Physics, 5-15-2020, Why NASA thinks nuclear reactors could supply power for human colonies in space, Chemical & Engineering News, <https://cen.acs.org/energy/nuclear-power/NASA-thinks-nuclear-reactors-supply/98/i19>, Willie T.] ****brackets in original****

The astronauts pass their days in darkness. After several months of living on the moon, they're still adjusting to the endless night. The crew's habitat at the lunar south pole sits in a shadowed crater—chosen for its promise of ice—that has not been touched by a single ray of sun for billions of years. Fortunately, the nearby **nuclear** reactor is unfazed by the lack of light. Connected to the astronauts' base camp by a kilometer of cables cautiously tracing the lunar surface, the reactor **provides** an **uninterrupted** supply of **electricity** for recharging rovers, running scientific instruments, and most importantly, powering the air and heating systems that keep the astronauts alive. This is one vision of what human exploration could look like on the moon. In fact, NASA has plans to make some versions of this scene a reality—and soon. The agency aims to send a human mission to the moon by 2024 in an effort named the Artemis project. Congress has allocated more than \$6 billion of NASA's 2020 fiscal budget for space exploration programs including the Space Launch System rocket, the Orion spacecraft, exploration ground systems, and research and development. The agency estimates that it will cost \$35 billion to land a crew on the lunar surface, including the first woman to step foot on the moon. After 2024, NASA hopes to move to launching one human mission each year and reach sustainable operations on the moon by 2028. The lessons learned in that phase will be crucial in preparing for future trips to Mars. One major effort will involve figuring out which power systems—including ones that have never been tested on the lunar surface, such as nuclear power—would best support future settlements. Whether the necessary materials can be brought safely to the moon and whether systems such as nuclear fission can run reliably under such harsh conditions are central questions that must be answered as engineers weigh their options. Going nuclear Choosing a power source depends on the particular mission's needs, says Michelle A. Rucker, an engineer at NASA's Lyndon B. Johnson Space Center who has researched possible architectures for space settlements. Electricity may come from nuclear reactors, solar panels, batteries, fuel cells, or some combination of these technologies connected in a power grid, she says. "I'm a big fan of all the types of power." But each power source has distinct pros and cons to consider. Solar arrays have reliably delivered renewable power in space for decades but are useless in places that never get any light, like the potentially resource-rich craters on the moon. And on the windy, dusty surface of Mars, solar panels may struggle to collect enough light, making them a risky option for powering life support systems, Rucker says. Batteries and fuel cells have limited lifetimes for now, relegating them to supplementary power sources at best. One type of nuclear device that has been used to power spacecraft is a radioisotope thermoelectric generator, which runs on the heat produced by the decay of plutonium-238. These generators have been used since the 1960s in Mars rovers and space probes sent to the outer edges of the solar system, such as the Voyager spacecraft and Cassini. Despite being the workhorses of scientific missions, the generators provide only several hundred watts of power, just enough to send radio signals back to Earth or power a camera. On Earth, the nuclear technology used by power plants is nuclear fission, which splits uranium-235 atoms via bombardment with neutrons to generate heat that's captured to produce

electricity. Nuclear fission holds the potential to provide a continuous, reliable source of power for a small space settlement designed to last for several years.

In the 1960s, many scientists thought fission reactors for space would follow on the heels of radioisotope generators. In 1965, the US launched a small nuclear fission–powered satellite named SNAP-10A, but electrical issues caused it to fail a mere 43 days after launch; it's still in orbit, now just another piece of space junk. The Soviet Union launched 31 nuclear fission–powered satellites over the next 2 decades. But the development of new nuclear fission reactors for space stalled during that time because of design problems and ballooning budgets. Engineers wanted advanced performance from these systems right away, which led to complicated and expensive designs, says David Poston, a nuclear engineer at Los Alamos National Laboratory. He and Patrick McClure, who specializes in reactor safety at Los Alamos, have worked at the lab for the past 25 years and recall the days when nuclear fission had fallen out of favor. “Pat and I were sitting around just kind of demoralized,” Poston says, “because we had gotten to the point where NASA wasn’t really interested anymore because the impression was that it was going to be too expensive and too hard to develop a fission reactor.” But the pair were convinced their team could come up with a design to dispel the funk that had settled around fission power for space. In the early 2010s, they got their chance: researchers at Los Alamos and later the NASA Glenn Research Center and the US Department of Energy began work on a joint project called Kilopower, now renamed the Nuclear Fission Power Project. The goal is to develop a new nuclear fission power system for space that would be capable of producing 10 kW of electrical energy. Designing the reactor Four of these reactors could easily provide the 40 kW of power that Rucker estimates a six-member crew would need to live on Mars. The team’s modular, compact design is lightweight enough for space exploration, in which every kilogram counts. Previous hypothetical fission-power concepts required a payload of 12–14 metric tons (a 6–7 t reactor plus a backup), whereas a single Kilopower reactor would weigh an estimated 1.5 t, she says. The team decided to approach the reactor design anew, putting one priority above all: simplicity. This meant not only maintaining a simple mechanical design but also looking for opportunities to simplify safety approvals and project management. As an example, McClure says, the team made a conscious choice to limit the size of the nuclear core to a container already being used to test nuclear materials instead of fabricating a new one. “I hate to call it an innovation because it’s not that complicated.

Testing nuclear-carrying spacecraft sparks nuclear accidents and global prolif

Feldscher 19 [Jacqueline Feldscher, "Push for nuclear power in space sets off proliferation debate", 09/27/2019, POLITICO, <https://www.politico.com/story/2019/09/27/nuclear-power-nasa-mars-alan-kuperman-q-and-a-1510896>] //ZL

This appeared to be NASA heading in a direction that is contrary to longstanding U.S. policy ... so it seemed like a good time to convene the stakeholders, including NASA, Congress, and the companies seeking to build these types of reactors but using low enriched uranium. MOST READ cbo-budget-69850.jpg Bessent flew to Florida to lobby Trump on tariff message John Roberts lifts midnight deadline for US to bring back man who was wrongly deported to El Salvador ‘How Ugly Is This Going to Be?’ ‘The opposite of what Americans voted for’: Market turmoil causes Trump backlash Supreme Court, in a win for Trump, lets admin cancel \$65M in teaching grants What do you hope to achieve?

We want to look at ... what are the potential risks of using this type of fuel in a space reactor. Those risks include ... a launch failure. That would send the thing up but it would come down in somebody else’s country. What would be coming down is 40 kilograms of highly-enriched uranium, which is enough for several nuclear weapons. ... About 20 percent of launches have failures. ... The government is well aware of the risk. I believe, but I can’t be sure, that it’s the reason President

Trump's presidential memorandum last month said any launch with highly-enriched uranium would require presidential approval before the launch. Another risk of highly-enriched uranium is the security costs for NASA would go through the roof. A study from a few years ago says extra costs would be \$40 million per launch and a one-time infrastructure update at the launch site of \$30 million, so the first launch would cost \$70 million extra for security. The third risk is that this would create a precedent for other countries. They might say, "The U.S. now thinks it's ok to use highly-enriched uranium, so we're going to enrich uranium to weapons grade." Maybe they are really using it for a [power-generating] reactor, or maybe they'll divert it for a bomb. The fourth big concern is that the commercial reactor builders are not licensed to handle highly-enriched uranium. so that means they could not partner with NASA to develop less expensive reactors.

Accidents cause nuke war

Starr '15 Steven **Starr**, Robin Collins, etc. September, 29th, 20**15**, Bulletin of the Atomic Scientists, New terminology to help prevent accidental nuclear war, <https://thebulletin.org/2015/09/new-terminology-to-help-prevent-accidental-nuclear-war/> // HZN Since the advent of US and Russian nuclear-armed ballistic missiles and early warning systems, the danger has always existed that a false warning of attack—believed to be true—could cause either nation to inadvertently launch a responsive “retaliatory” strike with its own nuclear forces. Fear of a disarming nuclear strike, especially during a crisis, creates immense pressure to use-or-lose nuclear forces if an attack is detected. Because **launch-ready** ballistic **missiles allow** either side to launch **a counter-strike before** nuclear **detonations confirm whether** or not **the** perceived “nuclear **attack**” **is real**, the launch of a retaliatory strike would in reality be a preemptive nuclear first-strike, should the warning prove to be false—**resulting in accidental nuclear war**. This pressure applies to any nation that might develop the ability to launch before detonation; as a result, what the United States and Russia decide to do could conceivably act as a role model for others—depending, of course, on the unique circumstances of each country. Consequently, there have been many calls to eliminate, or at least “de-alert,” these launch-ready forces—that is, to institute changes to the weapons systems that will prevent an overly hasty launch. This approach would make it physically impossible to start a nuclear war by accident, in response to a false warning of attack. Unfortunately, there has not been much enthusiasm in either the United States or Russia for de-alerting or eliminating high-alert nuclear forces. Yet the recent, escalating tensions between the United States and Russia have increased the need for both nations to address the dangers posed by their launch-ready strategic nuclear weapons. Almost all US and most Russian silo-based intercontinental ballistic missiles (ICBMs)—as well as some of their submarine-launched ballistic missiles—remain at launch-ready status, capable of rapid launch within a maximum of 15 minutes after receiving a warning. These weapons are armed with strategic nuclear warheads, and the detonation of even one such warhead could kill hundreds of thousands of people. There is another way to reduce the risk of accidental nuclear war: Russia and the United States could each independently adopt a policy of not launching their nuclear-armed missiles before confirmation of a nuclear detonation on their respective territories. Such a policy would make it impossible to launch a responsive or reflexive nuclear strike based upon a false warning of attack. To help them reach such commitments, the diplomatic world should address a factor that has spawned confusion and controversy: nuclear terminology.

C2 is Terrorism

Risk of nuclear terror is growing

Moulton 25 [Cyrus Moulton, 3-12-2025, “Risks of nuclear terrorism are high and growing.’ New tools, alliances, renewed focus needed, group led by Northeastern expert recommends.”,

Northeastern Global News,

<https://news.northeastern.edu/2024/06/18/nuclear-terrorism-risks-research/>

For roughly 80 years, the United States has managed the threat of nuclear terrorism through nonproliferation treaties, agency programs, intelligence activities, international monitoring support and more, withstanding the Cold War, the fall of the Soviet Union, and 9/11. A National Academies committee led by Northeastern University's Stephen Flynn wants to ensure the U.S. remains prepared. **"The issue of nuclear terrorism remains very much a real one, there are enormous stakes**

involved and the risks are high, but the issue has been falling off the radar screen of the American

public over the last 15 years, and the skill set of people involved in managing it is aging out," says Flynn, professor of political science and founding director of the

Global Resilience Institute at Northeastern. "We really need to keep our eye on the ball. It was quite timely for Congress to call for an assessment of this risk and provide recommendations for staying on top of this issue." In the 2021 National Defense Authorization Act, Congress mandated the U.S. Department of Defense and the U.S. Department of Energy's National Nuclear Security Agency to work with the National Academy of Sciences, Engineering and Medicine to assess the current state of nuclear terrorism and nuclear weapons and materials and advise the government on how to handle such issues. Flynn, an expert on national and homeland security, was appointed chair of the committee in 2022. The committee released its final report

on Tuesday. The report finds that **a lot has changed since the issue of nuclear terrorism was forefront in Americans'**

minds following 9/11 and the buildup to the Iraq War. "We had a war on terror after 9/11, but that didn't succeed in eliminating the terrorism

threat," Flynn says. "Terrorism continues to morph." **The outbreak of the Israel-Hamas War**, which occurred as the committee finalized its report,

demonstrates this morphing of terrorism. The **involvement of Hezbollah as a proxy of Iran**, and the involvement of

Hamas — both groups are designated terrorist groups by the U.S. State Department — **highlight a world where non-states and**

nuclear-seeking states collaborate in warfare, Flynn says. "The designation between non-state vs. state actors is blurry," Flynn says. "The assessment

reveals we have to be focused on where those two things may overlap." Also "blurring" is the line between domestic terrorism and international terrorism, Flynn says. "Particularly when

you look on the far right, **international terror groups are recruiting Americans** into these organizations, and

Americans are reaching out to extremist organizations that have terrorism elements," Flynn says.

Right wing nuclear terror, too.

Earnhardt et al 21 (Becca Earnhardt is a Research Associate with the Nuclear Security program at the Stimson Center. Brendan Hyatt is a nuclear security intern at the Stimson Center. Nickolas Roth serves as a senior director of Nuclear Materials Security at the Nuclear Threat Initiative, January 14, 2021, "A threat to confront: far-right extremists and nuclear terrorism", Bulletin of the Atomic Scientists,

<https://thebulletin.org/2021/01/a-threat-to-confront-far-right-extremists-and-nuclear-terrorism/>, DOA 4/11/23) KC

Last March, neo-Nazi Timothy Wilson was killed during a shootout as he was planning to bomb a hospital treating COVID-19 patients. Like other neo-Nazis, Wilson viewed the pandemic and increased unrest among the American public as an opportunity to popularize Nazi ideas, spark further chaos, and accelerate societal collapse.^[1] This past week, Ashli Babbitt was shot and killed while storming the US Capitol as part of a right-wing uprising; several years earlier, she was an employee of the Calvert Cliffs nuclear plant, exhibiting violent behavior during this period. ^[2] **Acts of violence by far-right extremists are on the rise in the United States. Until now, most**

of these incidents have lacked sophistication, but a critical question for national security experts is

whether US far-right extremist groups that espouse violence can carry out something catastrophic.

Every president serving in the last two decades has said that nuclear terrorism is a significant national

security threat. Analysis of this threat has been, for good reason, mostly focused on foreign extremist

groups, but recent events raise questions of whether there should be greater focus in the United

States on far-right, domestic extremist threats. These extremists represent a unique danger because of their prevalence in federal institutions such as the military and the potential that they might infiltrate nuclear facilities, where they could access sensitive information and nuclear materials. The far-right extremist nuclear terrorism threat, which has some history, is amplified today by an ideology focused on accelerating the collapse of society and a documented interest in pursuing nuclear terrorism. Officials need to act decisively to better understand and mitigate this threat. Far-right narratives of nuclear terror. The intersection between violent far-right extremist ideology and catastrophic terrorism goes back decades. In The Turner Diaries, a 1978 novel labeled the “bible of the racist right,” the protagonists use acts of nuclear terror in service of the creation of a “white world.” Protagonists bomb nuclear installations, seize nuclear weapons, target missiles at New York City and Tel Aviv, and ultimately destroy the Pentagon in a suicidal nuclear attack.[3] The International Centre for Counterterrorism ties the Diaries to “at least 200 murders and at least 40 terrorist attacks/hate crimes” in the last 40 years.[4] This includes Timothy

McKnight's 1995 bombing of the Alfred P. Murrah Federal Building in Oklahoma City, resulting in the deaths of 168 people. [3] McKnight, however, is not the only far-right terrorist to be inspired by the Diaries. In 2011, violent far-right extremist Anders Breivik's terror attacks killed 77 people in Norway. Dozens of pages in his 1,500-page “manifesto” discuss the execution of different acts of nuclear terrorism. [6] An increasingly active generation of violent far-right extremist groups and actors have adopted an especially dangerous ideology that is compatible with an act of nuclear terror: accelerationism. [7] Violent far-right extremists who adopt accelerationism view societal collapse as inevitable and seek to hasten that collapse to realize “total revolution”—the complete destruction of the existing system of governance. [8] Violent far-right extremists who adopt accelerationism hope to set off a series of violent chain events, with violence begetting more violence, destabilizing society. [9] Indiscriminate, highly destructive acts of terror—like a nuclear attack—are therefore perfect tools to sow chaos and accelerate this societal collapse. In Siegel, one of the defining theoretical works of violent far-right accelerationism, author and accelerationist leader James Mason writes that, “[White supremacists] will be the single motor to tear against the system, a force which against the system.” [10] He re-examines far-right extremist terrorism. Another far-right accelerationist proponent of the 2009 terrorist attack on the Israeli embassy in the Netherlands was the far-right extremist who inspired the 2011 Norway terror attacks. [11] Groups with nuclear interests inspired by the ideas of accelerationism, the modern brand of violent far-right extremism is becoming more destructive, and nuclear weapons certainly fit into this profile of catastrophic violence. The intention to bring about a catastrophic clash of civilizations based on racialist or better known terrorist organizations like Al Qaeda and Abu Ghaybi, both of which have pursued nuclear weapons. As director of intelligence and counterintelligence at the US Department of Energy, Neil Meusnier-Larson, once observed, “ Osama bin Laden has signaled a specific purpose for using WMD in a Qaeda’s quest to destroy the global status quo, and to create conditions more conducive to the overthrow of apostate regimes throughout the Islamic world.” [12] Like Al Qaeda, violent far-right extremists support the creation of a new society that is in line with their own ideology. One of the most notable and violent far-right extremist groups that have adopted accelerationism and operate in the United States is the Atomwaffen Division (AWD). [13] The organization’s name translates from German to “the nuclear weapons division,” indicating that its members have an explicit interest in nuclear terrorism. [14] Brandon Russell, a former Florida National Guard member and an AWD co-founder, is one case of an ongoing nuclear terrorist. A heavily armed Russell and a fellow AWD member were recently arrested while in route to the Turkey Point nuclear power plant. During the investigation officials found that Russell lived in an apartment with two AWD co-conspirators in the apartment was a prominently placed copy of the Turner Diaries and a framed photo of Oklahoma City bombing Timothy McKnight. The trio stockpiled weapons and explosives with the intent to blow up, among other targets, a nuclear power plant. In their apartment, police found pipe bomb components, traces of the explosive hexamethylene triperoxide diamine, and detonators. Police also detected two radioactive materials—thorium and americium—in his bedroom. [15] AWD was not the first far-right extremist in America to consider using radioactive or nuclear materials in a terrorist attack. Several previously documented attempts by violent far-right extremists to commit acts of radiological terror indicate a longstanding interest among far-right actors in highly destructive, non-conventional acts of terror. [16] In 2004, National Socialist Movement member Derwinite Van Crocker attempted to build a dirty bomb to blow up a courthouse. [17] In 2008, James Cummings, a white supremacist, obtained four 1-gallon containers of a mix of depleted uranium and thulium-232. He planned to use these materials to assemble a dirty bomb. [18] In 2013, a member of the so-called “Black Order” in Pennsylvania carried out research on radiological dispersal devices, bearing what kind of interest was required to kill hundreds. [19] Could they really pull it off? While some violent far-right extremists are clearly motivated to carry out catastrophic terrorist attacks, a question remains: Do they possess the means and opportunity to conduct an act of nuclear terrorism? There is no public evidence violent far-right extremist groups have obtained the resources or exhibited the requisite operational sophistication to carry out an act of nuclear terrorism. Many of the plots involving far-right extremists and nuclear terrorism have been poorly conceived and were unlikely to succeed. These incidents, however, likely do not provide a complete picture of the threat, because publicly accessible information on the capability of these groups is limited, creating ambiguity about their general capabilities. Moreover, predicting the capability of specific terrorist groups has proven to be exceptionally difficult. In January 2014, for example, Director of National Intelligence James Clapper did not list the Islamic State as a terrorist threat in his testimony to the Senate Select Committee on Intelligence. [20] He later testified that the Islamic State had stolen major portions of Syria’s nuclear stockpile and declared global jihad. [21] Intelligence on potential terrorist use of nuclear weapons is difficult to obtain. The most concerning evidence that violent far-right extremists might have access to nuclear weapons or weapons-useable material lies in their presence in the US military and other parts of the federal government. The presence of white supremacists in the military is well-known and well-documented. A 2019 poll revealed that 36 percent of active-duty military troops had witnessed evidence of white supremacist ideology in the military. [22] In 2020 alone, there were several recent examples of active service members being arrested for plotting far-right extremist acts of terrorism. In January 2020, Coast Guard Lt. Christopher Hasson was sentenced to 13 years in prison for planning a “mass casualty attack” in support of white nationalism. [23] In February, former Master Sgt. Cory Reeves was discharged from the Air Force because of his ties to white supremacist organizations. [24] And in June 2020, Private Ethan Melzer, a neo-Nazi in the US Army, attempted to provide information about US troops abroad, “including whereabouts, movement and security details,” to both white supremacist and jihadist groups. He gave this information with the intention of coordinating a suicidal, mass casualty “jihad” attack on those troops. [25] There is also evidence of violent far-right extremism in other government institutions. For example, in May 2018, Matthew Gebert, a State Department employee working on Pakistani and Indian energy policy, led a double life. [26] He worked the Washington, D.C. chapter of the white supremacist group the “High Staff,” associated with major white supremacist figures like Mike Pence and Richard Spencer, and secretly hosted a white nationalist podcast titled “The Patriotism.” [27] In a May 2019 episode of “The Patriotism,” Gebert announced, “We need a country founded for white people with a nuclear doctrine that you search how the world benefits.” [28] This pattern of insider threats raises key questions: How many violent far-right extremists are in the government? What materials or information do violent far-right extremists in government have access to? Are they sophisticated enough to steal nuclear material or sabotage a nuclear facility, or aid another actor on the outside? To what extent have violent far-right extremists penetrated organizations like national laboratories or nuclear material production facilities, where they might be able to acquire highly-enriched uranium or plutonium—the building blocks for constructing an improvised nuclear device? [29] We need to screen for far-right extremists. The US government needs to develop processes that ensure violent far-right extremists do not have access to nuclear weapons, weapons-useable nuclear materials, radiological material, or sensitive information about nuclear weapons or material.

Haleu means dirty nuclear bombs

Pashby 25 Tom Pashby: contributor for the New Civil Engineer. 1/10/25, “US Government assessing risk of SMRs being used to make dirty bombs”, New Civil Engineer, <https://www.newcivilengineer.com/latest/us-government-assessing-risk-of-smrs-being-used-to-make-dirty-bombs-10-01-2025/> // DOA: 3/13/25)JDE

The risk of small modular reactors (SMRs) being used to provide access to materials for dirty bombs (radioactive explosive devices) is being reviewed by the US Government. The review follows the publication of a paper published in the Science journal looking at the increase in demand for high-assay low-enriched uranium (HALEU) which can be used to fuel advanced modular reactors (AMRs) and SMRs. The paper, titled The weapons potential of high-assay low-enriched uranium posited that “Recent promotion of new reactor technologies appears to disregard decades-old concerns about nuclear proliferation”. Scott Kemp, Edwin S. Lyman, Mark R. Deinert, Richard L. Garwin, and Frank N. von Hippel authored the paper,

which said: "Preventing the proliferation of nuclear weapons has been a major thrust of international policymaking for more than 70 years. "Now, an explosion of interest in a nuclear reactor fuel called high-assay low-enriched uranium (HALEU), spurred by billions of dollars in US Government funding, threatens to undermine that system of control. "HALEU contains between 10 and 20% of the isotope uranium-235. At 20% 235U and above, the isotopic mixture is called highly enriched uranium (HEU) and is internationally recognised as being directly usable in nuclear weapons. "However, the practical limit for weapons lies below the 20% HALEU-HEU threshold. "Governments and others promoting the use of HALEU have not carefully considered the potential proliferation and terrorism risks that the wide adoption of this fuel creates." The "terrorism risks" the paper refers to can be understood to mean the creation of dirty bombs, which are relatively low-tech devices. Conventional explosives are used, rather than fission or fusion reactions, to spread radioactive material. US Government responds to paper announcing review U.S. Department of Energy under secretary for nuclear security and National Nuclear Security Administration (NNSA) administrator Jill Hruby wrote a letter published on 2 January in the peer review 'eLetters' section of the academic paper published on 6 June 2024. Hruby said the paper in Science, and a subsequent debate between the authors the wider nuclear community, promoted the NNSA to respond. "Given concerns about climate change coupled with increased energy demand, nuclear energy is poised for growth," she said. "Advanced and small modular reactors (A/SMRs) using HALEU fuel are under active development "NNSA recognises that reactor type, fuel enrichment level, fuel quantity, and fuel form are important factors in evaluating proliferation risks and believes that risk-informed and adaptive approaches to the proliferation challenges inherent in nuclear energy are warranted." She continued: "NNSA has a program to support U.S. A/SMR developers on security- and safeguards-by-design and promotes best practices for nuclear energy deployment by partnering with the International Atomic Energy Agency (IAEA). "With its national laboratories, NNSA has regularly collected data and evaluated HALEU risks, and is currently finalising plans to commission a National Academies report. Although these reports are largely classified, the information is used to inform programs, develop actions, and make recommendations to stakeholders. "It is important to address proliferation concerns about HALEU and important to responsibly develop A/SMRs. NNSA commits to working with academia, industry, the public, and IAEA to do just that." On 20 January 2025, President Trump will be sworn in for a second term, at which point he will be free to replace public servants with his preferred appointees at organisations including the NNSA. HALEU not being considered in the UK's SMR competition The main focus of SMR developers in the UK is the UK Government's Great British Nuclear (GBN) SMR competition. The competition winner or winners will have the opportunity to build a fleet of SMRs with government support on siting and funding. A GBN source confirmed to NCE that none of the developers in its SMR competition – name the developers – were proposing to use HALEU. NCE has previously explored the topic of whether waste from SMRs could be used to make nuclear warheads after the Department for Energy Security and Net Zero (DESNZ) did not rule out whether it was investigating this possibility. HALEU still popular in wider SMR research Work on SMRs outside of the GBN competition continues to heat up. Last Energy UK and newcleo are both active in the UK and are pushing for micro modular reactors and advanced modular reactors respectively. King's College London research fellow Ross Peel told NCE that HALEU continues to be popular with SMR developers and the risks faced outside of the USA are similar. Peel has recently authored papers with King's on Insider Threat Security Considerations for Advanced and Small Modular Reactors and Nuclear Industry Views on the Security of Small Modular Reactors: Results of a pilot survey, both published in October 2024. Peel said he has been "very pro-nuclear" for years but is working to help the industry to address his security concerns around SMRs, which he believes is "not where it should be". Peel said: "The article in Science caused a major argument when it came out and since, and is still doing so as more people become aware of it. The American Nuclear Society, for instance, prepared a letter to Science denouncing the article and tearing down the methods used by the authors, who are all highly respected non-proliferation scholars. "HALEU is central to the plans of many developers of novel nuclear technology because of the various benefits it offers. The potential security and proliferation risks are real, however, and proper consideration needs to be given to these. "The technical risks of HALEU in the UK and US are not different, although we do have a different background level of security risk than they do, which means that those technical risks might be experienced and managed in a different way. "Both countries have well-developed nuclear security infrastructure, however, which will help to manage these risks. A lot of concern from both countries will likely be around the export of HALEU fuel to reactors abroad, in foreign countries with less mature nuclear security and non-proliferation

systems. “Normalising the possession and use of uranium of up to 20% U-235 means that many states who might concern the US and/or the UK will be able to maintain a justifiable position that is that much closer to possessing nuclear weapons, whilst non-state actors (terrorists, criminals, and even simple disgruntled employees at nuclear sites and more) will potentially see their way to accessing a type of nuclear material that they could previously almost never imagine getting hold of.”

“Developers should be taking seriously the increased security and proliferation risks associated with HALEU use. I would recommend this be considered from the earliest stages of reactor and fuel design – the decision to use HALEU must be based on a full consideration of all factors, including security risk and proliferation risk. “Technology designers who think about these issues throughout their design process, in an integrated way alongside safety, economics, operability and all the rest, will have the greatest chance of producing well-conceived designs that address risks effectively and produce cost-effective nuclear energy.” Mixed oxide (MOX) fuel is touted by some developers like newcleo as a way of reducing the burden on society of nuclear waste by using it to fuel its own AMR design. newcleo said: “Through an innovative combination of existing and proven technologies, and by reviving a nuclear industry model based on the manufacture and multi-recycling of Mixed Oxide (Mox) fuel, newcleo aims to close the nuclear fuel cycle while safely producing clean, affordable, and practically inexhaustible energy required for low carbon economies.”

Peel continued: “MOX is different to HALEU. MOX is about using a mixture of uranium oxide and plutonium oxide to make the fuel (usually – other oxides can creep in too). Almost all nuclear fuel today is uranium oxide. “HALEU is to do specifically with the uranium within the uranium oxide, specifically, how much of it is uranium-235 vs uranium-238. Most reactors today operate with 2-5% uranium-235 within the overall uranium. HALEU is about moving that into a range of up to 19.999% - going to 20% would make it HEU (highly enriched uranium, which is considered to be unacceptable due to weapons-use risks). “So in theory, you could put HALEU into MOX, although no-one has proposed this as the whole point of putting plutonium in there is to replace the need for uranium-235. If you have both plutonium and HALEU in the same fuel you’re effectively doing two complicated and costly processes a bit, rather than focussing on doing one process more.”

Anti-proliferation body says lots of SMRs increases weapons risk

The Nuclear Information Service (NIS) describes itself as “an independent, not-for-profit research organisation” which investigates the UK’s nuclear weapons programme. NIS director David Cullen said: “This move by the NNSA is a tacit acknowledgement that warnings being raised about the proliferation risks of HALEU are not unfounded.”

“I hope that some of the results of their study will be made public so that there is a greater understanding of the dangers, which are just as relevant to the UK as to the US. “We don’t know very much about what would be done in the UK to mitigate the risk, as none of the SMR reactor designs have progressed very far in getting regulatory approval. “Only the Rolls-Royce SMR has passed the second stage of the Generic Design Assessment (GDA) process, which means that the Office for Nuclear Regulation have not identified any foundational problems with that design.”

GDA allows regulators to assess the safety, security, safeguards and environmental aspects of new reactor designs before site-specific proposals are brought forward. The GDA process assesses new nuclear power plant designs for deployment in the UK, demonstrating they can be built, operated and decommissioned in accordance with the highest standards of safety, security, safeguards and environmental protection. Cullen continued: “The second stage does assess security and safeguards (i.e. measures to prevent clandestine diversion of nuclear material), but only to identify fundamental flaws. “The third stage of the process is much more detailed. I hope the ONR will have an opportunity to draw upon the work the NNSA is undertaking. “Unfortunately, the industry’s vision for SMRs, where a much larger number of smaller reactors are deployed, substantially complicates both counter-proliferation monitoring and ensuring the security of nuclear material.”

“Design measures might be able to counter some of the more opportunistic security threats against an individual site, but they cannot meaningfully guard against the diversion of nuclear material by SMR operators.”

“Fundamentally, a greater number of sites and more material creates more opportunities for bad actors. There is no way to design around this basic fact.”

This is the missing piece for extremists

NAE 19 (The National Academy of Engineering (NAE) is an American **nonprofit, non-governmental organization**. It is part of the **National Academies of Sciences, Engineering, and Medicine (NASEM)**, along with the **National Academy of Sciences (NAS)** and the **National Academy of Medicine (NAM)**, September 16, 2019, National Academy of Engineering , “Prevent Nuclear

Terror”,<https://www.engineeringchallenges.org/challenges/nuclear.aspx>, DOA 3/10/25) KC

Long before 2001, defenders of national security worried about the possible immediate death of 300,000 people and the loss of thousands of square miles of land to productive use through an act of terror. From the beginnings of the nuclear age, the materials suitable for making a weapon have been accumulating around the world. Even some actual bombs may not be adequately secure against theft or sale in certain countries.**Nuclear reactors for research or power are scattered about the globe, capable of producing the**

raw material for nuclear devices. And the instructions for building explosive devices from such materials have been widely published, suggesting that access to the ingredients would make a bomb a realistic possibility. “It should not be assumed,” write physicists Richard Garwin and Georges Charpak, “that terrorists or other

groups wishing to make nuclear weapons cannot read.” **Consequently, the main obstacle to a terrorist planning a**

nuclear nightmare would be acquiring fissile material — plutonium or highly enriched uranium

capable of rapid nuclear fission. Nearly 2 million kilograms of each have already been produced and exist in the world today. **It**

takes less than ten kilograms of plutonium, or a few tens of kilograms of highly enriched uranium, to

build a bomb. Fission, or the splitting of an atom’s nucleus, was discovered originally in uranium. For a bomb, you need a highly

enriched mass of uranium typically consisting of 90 percent uranium-235, a form found at levels of less than 1 percent in uranium ore. Fuel for nuclear power reactors is only enriched 3 percent to 5 percent with respect to this trace form of uranium, and so is no good for

explosions. **Highly enriched bomb-grade uranium is, however, produced for some reactors (such as those**

used to power nuclear submarines and for some research reactors) and might be diverted to

terrorists.

Terrorists can build nuclear weapons if they get materials - numerous studies INCLUDING the Department of Defense prove

Nuclear Threat Initiative 25 [“Nuclear Terrorism”, 2025, Nuclear Threat Initiative,

<https://tutorials.nti.org/nuclear-and-radiological-security/terrorism-nuclear/>]

In 2007, the U.S. Air Force inadvertently flew six nuclear weapons across the United States to an air base in Louisiana that was unaware it had received them. [xx] The weapons sat on the runway for nearly 10 hours before being noticed, and without the appropriate security

protocols in place [xxi] In 2010, a group of peace activists infiltrated a military base in Belgium housing 10-20 U.S. nuclear weapons and

walked around undetected for over an hour [xxi] How difficult would it be for terrorists to acquire weapons-usable nuclear material? In an

effort to construct an Improvised Nuclear Device (IND), **the most difficult challenge for terrorists would be acquiring**

the necessary quality and quantity of weapons-usable, (i.e., fissile) **material.** A terrorist group is highly unlikely to produce its own

fissile material, whether by **enriching uranium** or producing plutonium in a reactor and separating it from spent fuel. These tasks

require technically complex and expensive **processes**, are difficult to accomplish clandestinely, and are likely beyond the

capabilities of a terrorist organization Obtaining fissile material through purchase or theft are the most realistic options for terrorists Seizures

of stolen HEU and plutonium indicate terrorists may be able to purchase fissile material on the black market Security breaches at both

civilian and non-civilian fissile material sites demonstrate that some stocks may remain vulnerable to theft In 2007, two armed teams

attacked the Pelindaba nuclear facility in South Africa, which stores hundreds of kilograms of weapons-grade HEU. One team penetrated an

electrified security fence, disabled intrusion detectors without setting off an alarm, shot an employee in the emergency control room, spent

45 minutes inside the facility before being engaged by on-site security forces, and escaped through its original point of entry. [xxiii] While the intruders never infiltrated the HEU storage room, the incident highlighted “substantial weaknesses in the site’s detection, assessment, and response arrangements” [xxiv] In 2012, an elderly nun and two peace activists broke into a high-security U.S. nuclear weapon materials site using bolt cutters to break through the perimeter fence and three interior perimeter fences without setting off alarms. [xxv] While the activists lacked malicious intent and did not infiltrate any of the buildings housing nuclear material, a government review of the incident found “troubling displays of ineptitude in responding to alarms, failures to maintain critical security equipment, overreliance on compensatory measures, misunderstanding of security protocols, poor communications, and weaknesses in contract and resource management” [xxvi] If they acquired fissile material, could terrorists construct a nuclear device? Yes. **Numerous studies have determined that a sophisticated terrorist organization with fissile material in hand could accomplish the technical and engineering tasks associated with building a crude nuclear weapon.** The [U.S.] Intelligence Community assessed that fabrication of at least a ‘crude’ nuclear device was within al-Qa’ida’s capabilities, if it could obtain fissile material. —Commission on the Intelligence Capabilities of the United States Regarding Weapons of Mass Destruction A small group of people, none of whom have ever had access to the classified literature, could possibly design and build a crude nuclear explosive device...Only modest machine-shop facilities that could be contracted for without arousing suspicion would be required. —**U.S. Office of Technology Assessment (1977)** We know that acquiring a weapon or the nuclear-explosive material to make one is the hardest step for terrorists to take and the easiest step for us to stop. By contrast, every subsequent step in the process-building the bomb, transporting it, and detonating it-is easier for the terrorists to take and harder for us to stop. —Sam Nunn, NTI Co-Chairman and Chief Executive Officer If fissile material is available, subnational or terrorist groups can likely produce an ‘improvised nuclear explosive device’ which will detonate with a significant nuclear yield. —**U.S. Department of Defense (1998)** Those who say that building a nuclear weapon is easy, they are wrong, but those who say that building a crude device is very difficult are even more wrong. —Harold Agnew, former director of **Los Alamos National Laboratory.**

Even one attack escalates---turns every impact.

Buis 18 [Irma Arguello and Emiliano J. Buis, * founder and chair of the NPSGlobal Foundation, and head of the secretariat of the Latin American and Caribbean Leadership Network. She holds a degree in physics, a Master’s in business administration, and completed graduate studies in defense and security, ** lawyer specializing in international law. He holds a PhD from the University of Buenos Aires (UBA), a Master’s in Human and Social Sciences from the University of Paris/Panthéon-Sorbonne, and a postgraduate diploma in national defense from the National Defense School, “The global impacts of a terrorist nuclear attack: What would happen? What should we do?,” 2018, *Bulletin of the Atomic Scientists*, Vol. 74, Issue 2, pp. 114-119, <https://doi.org/10.1080/00963402.2018.1436812>, Recut EA]

The consequences of a terrorist nuclear attack A small and primitive 1-kiloton fission bomb (with a yield of about one-fifteenth of the one dropped on Hiroshima, and certainly much less sophisticated; cf. Figure 1), detonated in any large capital city of the

developed world, would cause an unprecedented catastrophic scenario. [FIGURE 1 OMITTED] An estimate of direct effects in the attack's location includes a death toll of 7,300-to-23,000 people and 12,600-to-57,000 people injured, depending on the target's geography and population density. Total physical destruction of the city's infrastructure, due to the blast (shock wave) and thermal radiation, would cover a radius of about 500 meters from the point of detonation (also known as ground zero), while ionizing radiation greater than 5 Sieverts – compatible with the deadly acute radiation syndrome – would expand within an 850-meter radius. From the environmental point of view, such an area would be unusable for years. In addition, radioactive fallout would expand in an area of about 300 square kilometers, depending on meteorological conditions (cf. Figure 2). [FIGURE 2 OMITTED] But the consequences would go far beyond the effects in the target country, however, and promptly propagate worldwide. Global and national security, economy and finance, international governance and its framework, national political systems, and the behavior of governments and individuals would all be put under severe trial. The severity of the effects at a national level, however, would depend on the countries' level of development, geopolitical location, and resilience. Global security and regional/national defense schemes would be strongly affected. An increase in global distrust would spark rising tensions among countries and blocs, that could even lead to the brink of nuclear weapons use by states (if, for instance, a sponsor country is identified). The consequences of such a shocking scenario would include a decrease in states' self-control, an escalation of present conflicts and the emergence of new ones, accompanied by an increase in military unilateralism and military expenditures. Regarding the economic and financial impacts, a severe global economic depression would rise from the attack, likely lasting for years. Its duration would be strongly dependent on the course of the crisis. The main results of such a crisis would include a 2 percent fall of growth in global Gross Domestic Product, and a 4 percent decline of international trade in the two years following the attack (cf. Figure 3). In the case of developing and less-developed countries, the economic impacts would also include a shortage of high-technology products such as medicines, as well as a fall in foreign direct investment and a severe decline of international humanitarian aid toward low-income countries. We expect an increase of unemployment and poverty in all countries. Global poverty would raise about 4 percent after the attack, which implies that at least 30 million more people would be living in extreme poverty, in addition to the current estimated 767 million. [FIGURE 3 OMITTED] In the area of international relations, we would expect a breakdown of key doctrines involving politics, security, and relations among states. These international tensions could lead to a collapse of the nuclear order as we know it today, with a consequent setback of nuclear disarmament and nonproliferation commitments. In other words, the whole system based on the Nuclear Non-Proliferation Treaty would be put under severe trial. After the attack, there would be a reassessment of existing security doctrines, and a deep review of concepts such as nuclear deterrence, no-first-use, proportionality, and negative security assurances. Finally, the behavior of governments and individuals would also change radically. Internal chaos fueled by the media and social networks would threaten governance at all levels, with greater impact on those countries with weak institutional frameworks. Social turbulence would emerge in most countries, with consequent attempts by governments to impose restrictions on personal freedoms to preserve order – possibly by declaring a state of siege or state of emergency – and legislation would surely become tougher on human rights. There would also be a significant increase in social fragmentation – with a deepening of antagonistic views, mistrust, and intolerance, both within countries and towards others – and a resurgence of large-scale social movements fostered by ideological interests and easily mobilized through social media. Prevention, preparedness, response Given the severity of the impacts, no country in possession of nuclear weapons or weapons-usable materials can guarantee its full protection

against nuclear terrorism or nuclear smuggling for proliferation purposes. Nor is it realistic to conceive of full compensation to others in the international community, if a catastrophic event happens because of any country's acts or omissions. Therefore, we consider that prevention is the only acceptable way forward to preserve global stability.

Nuclear war causes extinction

Starr 14 (Steven Starr: Director, Clinical Laboratory Science Program at the U of Missouri. Senior scientist for Physicians for Social Responsibility. 5/30/14, "The Lethality of Nuclear Weapons: Nuclear War has No Winner", Centre for Research on Globalization, <http://www.globalresearch.ca/the-lethality-of-nuclear-weapons-nuclear-war-has-no-winner/5385611> // DOA: 4/1/21)JDE

Paul Craig Roberts held top security clearances. He has repeatedly warned that a US-Russian nuclear war would wipe out the human race, along with all other complex forms of life. As a scientist with expert knowledge, I wish to echo and explain his warning.//// Nuclear war has no winner. Beginning in 2006, several of the world's leading climatologists (at Rutgers, UCLA, John Hopkins University, and the University of Colorado-Boulder) published a series of studies that evaluated the long-term environmental consequences of a nuclear war, including baseline scenarios fought with merely 1% of the explosive power in the US and/or Russian launch-ready nuclear arsenals. They concluded that the consequences of even a "small" nuclear war would include catastrophic disruptions of global climate[i] and massive destruction of Earth's protective ozone layer[ii]. These and more recent studies predict that global agriculture would be so negatively affected by such a war, a global famine would result, which would cause up to 2 billion people to starve to death. [iii]//// These peer-reviewed studies – which were analyzed by the best scientists in the world and found to be without error – also predict that a war fought with less than half of US or Russian strategic nuclear weapons would destroy the human race. [iv] In other words, a us-Russian nuclear war would create such extreme long-term damage to the global environment that it would leave the Earth uninhabitable for humans and most animal forms of life.//// A recent article in the Bulletin of the Atomic Scientists, "Self-assured destruction: The climate impacts of nuclear war", [v] begins by stating://// "A nuclear war between Russia and the United States, even after the arsenal reductions planned under New START, could produce a nuclear winter. Hence, an attack by either side could be suicidal, resulting in self-assured destruction." In 2009, I wrote an article [vi] for the International Commission on Nuclear Non-proliferation and Disarmament that summarizes the findings of these studies. It explains that nuclear firestorms would produce millions of tons of smoke, which would rise above cloud level and form a global stratospheric smoke layer that would rapidly encircle the Earth. The smoke layer would remain for at least a decade, and it would act to destroy the protective ozone layer (vastly increasing the UV-B reaching Earth [vii]) as well as block warming sunlight, thus creating Ice Age weather conditions that would last 10 years or longer.//// Following a US-Russian nuclear war, temperatures in the central US and Eurasia would fall below freezing every day for one to three years; the intense cold would completely eliminate growing seasons for a decade or longer. No crops could be grown, leading to a famine that would kill most humans and large animal populations.//// Electromagnetic pulse from high-altitude nuclear detonations would destroy the integrated circuits in all modern electronic devices [viii], including those in commercial nuclear power plants. Every nuclear reactor would almost instantly meltdown; every nuclear spent fuel pool (which contain many times more radioactivity than found in the reactors) would boil-off, releasing vast amounts of long-lived radioactivity. The fallout would make most of the US and Europe uninhabitable. Of course, the survivors of the nuclear war would be starving to death anyway.////

Overall, safeguards fail and reactors get exported.

UCS 21 (*Union of Concerned Scientists, nonprofit science advocacy organization, No date listed, 3-14-2021 from Internet Archive, "‘Advanced’ Isn’t Always Better: Assessing the Safety, Security, and Environmental Impacts of Non-Light Water Nuclear Reactors,"

https://www.ucsusa.org/sites/default/files/2021-05/ucs-es-AR-3.21-web_May%20rev.pdf)

Nuclear proliferation and nuclear terrorism risk is the danger that nations or terrorist groups could illicitly obtain nuclear-weapon-usable materials from reactors or fuel cycle facilities. LWRs operating on a once-through fuel cycle present relatively low proliferation and terrorism risks. However, any nuclear fuel cycle that utilizes reprocessing and recycling of spent fuel poses significantly greater nuclear proliferation and terrorism risks than do LWRs without reprocessing, because it provides far greater opportunities for diversion or theft of plutonium and other nuclear-weaponusable materials. International safeguards and security measures for reactors and fuel cycles with reprocessing are costly and cumbersome, and they cannot fully compensate for the increased vulnerability resulting from separating weapon-usable materials. Also using HALEU instead of less-enriched forms of LEU would increase proliferation and terrorism risks, although to a far lesser extent than using plutonium or uranium-233. Nuclear proliferation is not a risk in the United States simply because it already possesses nuclear weapons and is designated as a nuclear-weapon state under the Nuclear Non-Proliferation Treaty. As such, it is not obligated to submit its nuclear facilities and materials for verification by the International Atomic Energy Agency (IAEA), although it can do so voluntarily. However, US reactor development does have implications for proliferation, both because US vendors seek to export new reactors to other countries and because other countries are likely to emulate the US program. The United States has the responsibility to set a good international example by ensuring its own nuclear enterprise meets the highest nonproliferation standards.⁴

C3 is Tradeoff.

Clean energy is rapidly advancing and solves energy needs by 2035. Beinhocker 25: clean energy Trump cannot save a shrinking fossil fuel industry. Clean energy is 10,000 times cheaper, costs a tenth today. Innovations enable electrification by 2035. Fossil fuel demand will permanently disappear.

Nuclear energy kills renewables—diverts attention, resources, monopolizes grids—make them answer every warrant. CAN 24: alarming nuclear push. Promoters derail deals supporting renewables. 100% renewables ambition is required. Wind avoid four times more CO₂ than nuclear. Nuclear unreliable. Heatwaves, droughts, flooding increase disconnections. SMRs have same limitations.

Else—climate change escalates—key inflection points. Borenstein 23: Humanity can prevent the worst. Requires quickly slashing fossil fuel use. Humanity is on thin ice, needs action. It’s not too late. After 1.5 degrees, “risks pile on,” a critical limit.

Warming causes extinction. Taylor et al. 24: Every degree adds to warming. Carbon makes oceans acidic. Ocean systems cannot adapt. A cascade could push Earth onto a Hothouse path. Tipping points accelerate. It is impossible to adapt.