Analysis: Is nuclear energy a terror risk?

Chicken Little analysis.

UPI Germany
May 5, 2006

Although the world has been spared from a large-scale terror attack on a nuclear power plant, the danger is real and the consequences would be catastrophic, experts say.

"Nuclear energy is a global security, terrorism and proliferation risk," Martin Schulz, head of the Social Democrat faction in the European Parliament, said last month in Berlin at a conference marking the 20th anniversary of the Chernobyl accident.

The debate over a possible attack on a nuclear power plant comes amid increasing indications from Western government that they may turn to nuclear power in a bid to diversify their sources of energy because they see it as a clean, greenhouse emissions-free form of energy.

Terror attacks on nuclear power plants can come in different forms: bombing a plant from the air; steering a large plane into a plant's outer shell; shooting at it from land or sea; and finally, attempting to sabotage either through breaking in or placing a worker inside.

Unrealistic scenarios?

According to Wolfgang Kromp, a security expert at the University of Vienna, a crew training for an announced simulated sabotage incident at a power plant in Smolensk, Russia, failed to stop a mock terrorist. Despite two weeks of intense security preparations, the man was able to overcome all hurdles and enter the plant. Once inside he vanished, and officials could not locate him until he revealed his whereabouts some three days later: He had been to the main control room, talking to personnel there.

"If there are 10 targeted attempts to get into a nuclear power plant, then three will make it," Kromp said, speaking at the same conference.

Nuclear reactors are concentrated in a few highly developed countries, mainly in the United States, Western Europe, Russia and East Asia.

For small and mid-sized countries like Austria and the Netherlands, a catastrophic event involving a nuclear power plant likely would be devastating, Kromp said.

"In Austria, depending on the wind, the whole country could be radiated."

Proponents of nuclear energy say the newest reactors are highly secure. Heinz-Peter Butz, a spokesman for the Society for Plant and Reactor Security, a scientific-technical expert and research organization, said the plants in Germany not only meet, but go far beyond the standards set by the International Atomic Energy Agency, the U.N. nuclear watchdog.

"For example, the German safety standards against airplane crashes are the best in the world," he told United Press International recently. "We have outer walls that are over seven feet thick; even if a jet plane crashes into a plant, no radiation will be released."

Germany's strict regulations are not based on fear from terrorist attacks: rather, they are a consequence of the ease with which numerous Starfighter jet planes of the German Air Force crashed in the 1960s and 1970s.

But the threat did not disappear with the phasing-out of the troubled Starfighter: In 1988, a French Mirage F1 jet went down over a German forest, roughly a mile -- or just five flight seconds -- away from the nuclear power plant in Ohu, Germany.

Since Sept. 11, 2001, all major nuclear powers have increased security standards in, around and above their plants.

However, some opponents of nuclear energy also claim terrorists could target disposal sites storing low-level and high-level nuclear waste.

"A terrorist attack on a nuclear waste storage site could be more catastrophic than the Chernobyl accident," Robert Alvarez, head of the Nuclear Policy Project at the Institute for Policy Studies, a Washington-based think tank, said last month in Berlin.

One such site is in Hanford, in south-central Washington State. Spanning some 586 square miles, the site was established in the early 1940s to provide plutonium for the nuclear bombs later dropped on Japan.

Most of Hanford's reactors were shut down in the 1960s, but nuclear waste still remains at the site, and officials are involved in a major cleanup operation costing billions.

Roughly 55 million gallons of high-level nuclear waste remains stored in 177 tanks, most of them past their life expectancy, and that bothers Alvarez.

"There is a 50-50 chance of a catastrophic accident at the Hanford Site," he said. "If that happens, you could write off large parts of the Northwestern U.S. population."

Earlier this year, a rotor and stator inside a nuclear power plant near Cape Town, South Africa, were damaged because a 3-inch bolt was left in the rotor. A government inquiry has yet to establish whether the bolt got there through negligence or sabotage.

After all, it may have been Osama bin Laden.

Khalid Sheik Mohammed, one of the main perpetrators behind the Sept. 11attacks, according to the Sept. 11 Commission Report, told interrogators about a grand plan he had initially conceived for that fateful day: hijacking 10 commercial aircraft that would crash into targets on both coasts and Washington.

"They included those eventually hit on Sept. 11 plus CIA and FBI headquarters, nuclear power plants, and the tallest buildings in California and the state of Washington."

He told interrogators that "this proposal received a lukewarm response" from al-Qaida leaders. Bin Laden himself listened to the plan, "but was not convinced that it was practical."

The report goes on to reveal that Mohamed Atta, the ringleader of the attacks, considered targeting a nuclear facility he had spotted while on reconnaissance flights near New York; the plan was eventually abandoned because the other pilots said such targets lacked symbolic value.