

Experts wrangle over U.S. nuclear reactor security

By Vibeke Laroi

SAN FRANCISCO, June 11 (Reuters) - As U.S. government officials raise the specter of further attacks on the United States, the debate over the security of the nation's nuclear power plants has taken on a new urgency.

The Sept. 11 attacks opened a previously unthinkable possibility: crashing an airliner into an atomic reactor.

But whether America's nuclear plants are more secure now than they were nine months ago depends on who you ask.

The nuclear industry has tightened security since Sept. 11, even though it claims the nation's 103 commercial reactors were among the best-protected structures long before the attacks.

Security perimeters have been extended and the number of guards at each plant has jumped on average to 110 from 70, Nuclear Energy Institute spokesman Scott Peterson said.

National guard troops are still stationed at nine reactors, all in Pennsylvania, though they have been withdrawn from plants to which they were deployed in 10 other states shortly after the attacks.

Critics of nuclear power demand even stricter measures, such as posting military guards at all plants, and accuse regulators of reacting too slowly to new threats.

They also insist the plants remain high-profile targets and that the thick, reinforced concrete containment domes housing reactors cannot withstand a direct hit from a jumbo jetliner.

The nuclear industry disagrees.

"If you were a terrorist looking for targets that you had a chance to be successful at, you would not be looking at a nuclear power plant," Peterson said, adding that reactors are relatively low-lying targets that would be hard to hit with a large aircraft flying at full speed.

PROOF IN THE PUDDING

Ultimately, no one knows whether the plants could withstand the impact of a hijacked airliner because this scenario has never been put to a test.

But the Nuclear Regulatory Commission and engineers in the industry it oversees are now studying ways to secure a plant against such an attack and hope to have their findings available by the end of the summer.

When the commission launched a review of nuclear power plant security after Sept. 11, it also suspended training drills that simulate "force-on-force" attacks to test security.

"When the nuclear industry tells the public not to worry because security is adequate, they can't prove that because the proof is in the pudding, in the force-on-force tests," said Edwin Lyman, head of watchdog group Nuclear Control Institute.

And the mock force drills, which focus on ground attacks involving only a handful of assailants, must be revamped to fit the broader threats of a post-Sept. 11 world, critics say.

Used nuclear fuel is another concern -- especially after the United States on Monday announced the arrest of one of its own citizens on charges of trying to make a "dirty" bomb, a conventional explosive used to spread radioactive waste.

Storage tanks for spent fuel rods are brimming at many reactors after years of legislative wrangling over where to build a secure central dump for used nuclear fuel.

Because spent fuel is far less likely to explode than a highly pressurized reactor core, their storage tanks are more thinly constructed and, according to some critics, far more vulnerable to attack.

TOP SECURITY ALERT

After Sept. 11, the NRC recommended all U.S. nuclear power plants go on top security alert. They remain there.

In February, it went one step further, ordering operators to implement new security measures or face fines or a suspension of their license.

"If operators had already done everything needed, the NRC would not have had to issue these orders," Lyman said, adding it gave nuclear operators 20 days to submit plans and until Aug. 31 to implement them, a generous timetable.

Industry critics have also blasted the NRC for lapses in plant security background checks, pointing to at least one incident in which a contract worker with a criminal record gained access to a South Carolina reactor.

Meanwhile, growing public doubts about the nation's ability to protect its nuclear facilities have accelerated a NRC program to make potassium iodide tablets available to anyone living within 10 miles (16 km) of a nuclear power plant.

The tablets, which prevent the thyroid gland from absorbing radioactivity, were dispensed for the first time earlier this year on request through police or local health offices.

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