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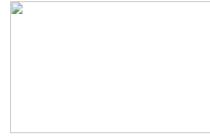
MOSCOW - An unnamed US nuclear official has said that highly radioactive materials — possibly including plutonium — have been stolen from Russia's new Volgodonsk nuclear power plant by Chechen separatists.

Charles Digges, 2002-07-23 11:50

Russian nuclear and law enforcement authorities, however, have strenuously denied the charge, calling the leak by the US Official to Britain's Guardian newspaper a concoction planted in the press by the Central Intelligence Agency, or CIA, to discredit Russian nuclear security. US nuclear experts—though not ruling out the theft of less volatile radioactive metals - have also cast doubt on the plutonium theft detailed by the anonymous US official, citing the extreme danger to thieves that such a theft would involve.

Speaking anonymously with the Guardian, the US official attributed the theft from the plant, located near Rostov-on-Don, to Chechen rebel factions — who the Russian government says, and many US Administration officials believe, have ties to the al Qaeda terror network.

The US official said the alleged heist occurred sometime within the last 12 months and added that the United States fears that weapons-grade plutonium — which may have been stolen during the robbery — may have fallen into the hands of Iraq or Libya, the Guardian reported.



Volgodonsk NPP, located in Rostov region, south of Russia, was launched in 2001. It operates one VVER-1000 reactor unit.

But other US experts familiar with the supposed theft say the particulars of the case, including how much material was stolen, are murky and the precise details of the security breach — if any occurred — remain unclear. The US official quoted by the Guardian said there was the "possibility that a significant amount of plutonium was removed," together with other radioactive metals. These included caesium, strontium and low-enriched uranium, which pose a threat to human health if detonated with conventional explosives — a so-called "dirty bomb."

"Chechen groups have relationships with countries we do not find exceptionally desirable. The possibility that these metals may have been given to another party is very troubling," the unnamed US official said.

The Volgodonsk nuclear plant — one of the newest atomic facilities in Russia — went online last December, after a nine-month trial period. It uses a VVER-1000 reactor and is slated to get a second power bloc soon.

But thus far, there is no real agreement among experts who have studied the case as about what, if anything, was taken from the plant. Russian accounting practices for radioactive materials are widely acknowledged to be lacking.

Yegor Obukhov, head of the plant's press service, touted security and accounting at the Volgodonsk station as "the best in Russia," Obukhov told Bellona Web.

"Not a single gram of radioactive substances has ever gone missing in the plant's 16-month operation," Obukhov said.

Obukhov also denied that the weapons-grade plutonium referred to in the Guardian report would ever have been stored at his plant, saying 'we are not running a secret weapons construction facility.'

But assessing the information piling in from a variety of sources is not easy for those who track the theft of radioactive materials in Russia.

"It is a bit difficult to speculate not knowing exactly what kind of material was stolen. Reports vary from caesium, strontium and depleted uranium to low-enriched uranium and 'weapons-grade plutonium,'" said Lyudmila Zaitseva, of Stanford University's Institute of International Studies, which runs the world's perhaps most comprehensive database on the theft and smuggling of radioactive materials.

She added that any weapons-grade plutonium that the US official suggested was stolen from the Volgodonsk facility was simply impossible.

"There is no weapons-grade plutonium at nuclear power plants." she told Bellona Web in an interview.

"On the other hand, if it was spent nuclear fuel (SNF) that was stolen, that does contain plutonium — though not of weapons grade — as well as other, highly radioactive materials.'

But to make plutonium from SNF weapons-usable, Zaitseva said the plutonium would have to be separated from other substances in the SNF, which is a technologically demanding and costly procedure that only a few countries in the world can afford, like England, France and Russia.

"Besides," said Zaitseva, "it would be extremely difficult to steal spent fuel from a nuclear power plant due to the large size and, most importantly, very high radioactivity of fuel assemblies, which makes them self-protective.'

A US nuclear physicist involved in non-proliferation efforts in Russia, speaking on conditions of anonymity with Bellona Web, agreed with Zaitseva's assessment.

"This stuff is stored mostly in pools of highly radioactive wet storage facilities — the SNF assemblies themselves are seven meters long and weigh around 300 kilograms," he said.

"And anybody trying to handle that and get it out of a plant clandestinely would get a very high dose of radiation on the spot — that's what 'self-protective' means. It just doesn't sound like a feasible theft at all if the plutonium the US official is referring to is plutonium contained in spent fuel," he said. He echoed Zaitseva's assertion that weapons-grade plutonium would not be found at a nuclear power plant.

"That would be nonsense." said the US physicist.

What would not surprise US nuclear analysts would be the theft of low-enriched uranium (LEU) from the Volgodonsk facility.

"It would not be too surprising if nuclear fuel had been stolen from a power plant. This has happened before in the former Soviet Union," said Matthew Bunn, senior research assistant at the Managing the Atom project at Harvard University.

"If it was fresh nuclear fuel — low-enriched uranium — I agree [...] that it wouldn't be too surprising," said Zaitseva. "For example, a whole fuel assembly, seven meters long and weighing 280 kilograms, was stolen from the Ignalina nuclear power plant in Lithuania in 1992 as a result of collusion between the facility employees and guards, who tied the assembly to the bottom of the personnel bus and thus carried it outside the facility. Parts of the material were later recovered on several occasions in Eastern Europe and former Soviet Union."

When offered a similar scenario for the Volgodonsk facility, Zaitseva nonetheless remained perplexed.

"[...] Because caesium and strontium are also mentioned, I am still puzzled as to what exactly was stolen," she said.

The US official said that the theft was reported by Russian officials to the International Atomic Energy Agency (IAEA), which then informed the US Department of Energy (DOE) about the incident.

Russia has an estimated 125 tonnes of weapons-grade plutonium considered by Western experts to be "at risk" for theft because of poor security. US government experts are negotiating with Russian officials to speed through urgently needed safety upgrades via programmes like Nunn-Lugar. Furthermore, the G8 group of nations last month pledged \$10 billion over the next ten years to help Russia protect its ageing weapons arsenals.

A spokeswoman for the IAEA said her organization confirmed receiving reports of the theft from the Russian government. However, by Monday, the IAEA, the Volgodonsk nuclear power station, and even the secretive Russian Nuclear Ministry, or Minatom — all but the DOE, which would not comment — had reached a consensus that the theft never took place.

Aleksandr Turinsky, chief press relations officer for the Rostov Federal Security Service, or FSB, told Bellona Web that the Guardian report was "just part of the psychological and information war that Chechen rebels are waging against Russia."

"I also don't understand why this American official decided to share this information with a British paper as opposed to a representatives of Russia's press, who are, after all, the supposed allies of the United States in the war on terror," Turinsky said.

But the US official told the Guardian that: "[this] incident is tied to a broader issue. There are a couple of other occasions when the Chechens may have acquired nuclear or radioactive sources. Russia is rightly very concerned about that. We should not just blame Russia. The United States does not protect its materials better than anyone else."

Southern Russia, bordering nations of Central Asia and the Caucasus — which are seen by the United Stated as posing a world security threat — is considered a flashpoint in non-proliferation. The US official said there have been a "number of occasions" in which Iranian agents tried to buy weapons-grade plutonium from facilities in Southern Russia.

"[These facilities] seem to have been scammed a few times," he told the Guardian.

But the involvement of Chechen separatists in the alleged theft at the Volgodonsk facility seemed "illogical" to Zaitseva.

"I believe that if they seriously wanted to sell weapons-grade plutonium to Iraq or Libya, they wouldn't look for it at a nuclear power plant," she said.

"On the other hand, if they needed radioactive material for a dirty bomb, they wouldn't have to go to such lengths [as stealing it from the Volgodonsk station] either, because they seem to have successfully used the Radon facility — a disposal site for used ionising radiation sources and other radioactive waste from the North Caucasus region of Russia, [situated] near the Chechen village of Tolstoy-Yurt — for this purpose."

In that incident, Zaitseva's data indicate, half of the 900 cubic meters of radioactive waste with radioactivity levels of 1,500 Curies stored at Radon was reportedly found missing from the depository after the first military campaign in the breakaway republic of Chechnya in 1996.

Many of these stolen radioactive containers and sources were found later on numerous occasions in the Chechen capital of Grozny, and other parts of the region, by the Russian Ministry of Emergency Situations during the second military campaign, which began in 2000.

Russian intelligence officials believed that this material might have been used by Chechen militants for making "powerful bombs," as some of it was found in a workshop for the production of mortars and grenade cup discharges, which was set up before the second campaign and reportedly belonged to Chechen warlord Shamil Basayev.

However, there were only two incidents suggesting that such dirty bombs were actually made and meant to be used by Chechen militants. In 1998, a container full of radioactive substances was found next to a railway line near Argun in Chechnya with a mine attached to it. Russian intelligence officials touted the discovery as a foiled act of sabotage, Zaitseva said.

Earlier, in 1996, Chechen rebels left a substantial quantity of caesium-137 wrapped in conventional explosives in Izmailovo park in Moscow. They notified the local media and the device was safely removed by police.

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