Nuclear Reactors Are Targets For Terrorism

Nuclear power reactors are recognized in the aftermath of 9/11, as terrorist targets. Reactor sites contain more than a 1000 times the radiation released in one Hiroshima sized atomic bomb. The US Nuclear Regulatory Commission estimated a single attack could bring about 100,000 deaths in the first year after the accident, an additional 600,000 immediate injuries and 40,000 long term cancers. The land and property destroyed would remain useless for decades. Significantly, homeowner's policies do not cover nuclear disasters. One nuclear reactor, successfully destroyed, would instill the kind of fear sought by terrorists.

TERRORISM AND NUKEs

BBC Monitoring reported September 12, 2001 that Russian intelligence warned the CIA that more attacks were imminent and that "the next target of the terrorists will be an American nuclear facility." U.S. News and World Reports Amhed Ressham, the terrorist, convicted of trying to import explosives into the US to bomb Los Angeles International Airport, referred in his testimony to a camp in Afghanistan where he received training to destroy power plants, airports, railroads and large corporations (NYT, 07-04-01).

Al Qaida terrorist captured in Pakistan in September 2002 stated that the first targets considered for the 9/11 terrorist attack were nuclear reactors in the US, but rejected it because of the threat of worldwide contamination. (NYT, 09-09-02)

REACTOR FUEL POOLS ARE TARGETS FOR TERRORISM

The National Academy of Science acknowledged that both operating and shuttered reactor sites are targets since the tens of millions of curies of high level waste contained in fuel pools is the likely target. Dry cask storage of high level waste is also vulnerable. None could withstand an attack like America experienced on September 11th. In fact fuel pools and cask storage are more vulnerable and far less secure than the containment buildings.

Vermont Yankee is a Mark 1 boiling water reactor with it's fuel pool located outside of containment; it is suspended seven stories above ground with a metal roof. It has over 50 million curies of high level waste in its pool. The National Academy of Science acknowledges the Mark 1 reactors and their fuel pools are the most vulnerable to a terrorist attack. In addition, Vermont Yankee's dry cast storage system is vulnerable, located on the banks of the Connecticut River out in the open camouflaged by a wooden fence. Presently there are 5 casks on a concrete pad; there may well be over 40 by the time Vermont Yankee closes.

DUMPING IT SOMEWHERE ELSE IS NO HELP!

Shipping high level waste somewhere else is no answer. Even if Yucca Mountain or another dump were sited, the fuel would not move for decades. As long as reactors create more waste, the pools and dry storage need effective protection. It is also essential that we not forget the deadly effects of routine operation of reactors during peace times that have caused epidemics in disease and great suffering in nuclear fuel cycle communities.

The nuclear industry responds to the prospect of a terrorist attack as a public relations problem. It attempts to conceal the grim reality of increased vulnerability that reactor communities live with. Public relations will not solve the problem. The awful truth is that nuclear waste will always be vulnerable to terrorism. Reactors should be shuttered since as long as they operate they create more deadly waste, making reactor communities hostage to terrorist attacks and suffering.

9 DETERENTS TO TERRORISM

1. FEDERALIZE SECURITY AT REACTOR SITES. As with airline security, nuclear corporation’s drive for profits undermine their ability to adequately defend nuclear sites.
2. CREATE HARDENED ON SITE STORAGE (HOSS) so that an attack on a nuclear reactor site would not result in catastrophic releases. Hardening should allow security to resist almost all types of attacks. The amount of releases projected in even severe attacks should be small enough that the storage system would be unattractive as a terrorist target. Require HOSS, emergency planning and security measures to be maintained at shuttered reactors as well since irradiated fuel is the target for terrorism. Currently, they are not.

- **REQUIRE THAT FUEL BE REMOVED FROM FILLED TO CAPACITY FUEL POOLS.**
- **TRANSFER THE FUEL INTO DRY CASK STORAGE SYSTEM** that can withstand a terrorist attack from the air, land or water.
- **CREATE DEFENSE IN DEPTH ON SITE** to train security to deal with realistic attacks
- **REVISE EMERGENCY PLANNING** to include terrorist attacks which create a significantly different scenario for evacuation. Intentional aircraft crashes and suicide bombers must be incorporated into all risk assessments for nuclear reactors. Currently, they are not.
- **CAMOUFLAGE THE DRY CASK STORAGE.**

3. CREATE NO FLY ZONES Require FAA to create no-flight zones over nuclear power stations.

4. REQUIRE NUCLEAR REACTORS TO PASS THE ORGANIZATIONAL SAFEGUARDS RESPONSE EVENT program (OSRE), an NRC force-on-force test, held every two years. 47% of all reactors in the country have repeatedly failed the OSRE Testing!

- **CREATE A SEPARATE INDEPENDENT DIVISION UNDER NRC FOR THE OSRE PROGRAM** that works directly with the federalized security as well as nuclear corporations.
- **MANDATE 2 YEAR SECURITY TESTS**
- **REQUIRE CESSATION OF OPERATIONS IF A REACTOR FAILS OSRE** until corrective actions are instituted.

5. REQUIRE REACTOR SHUT DOWN IN RESPONSE TO THE HIGHEST ALERT IN A TERRORIST SITUATION. Operators can perform functions best in a non-crisis situation. If any safety system is found inoperable, there may be time for corrective action before a real crisis hits.

6. REQUIRE NUCLEAR REACTORS TO BROADEN THEIR OWNER-CONTROLLED AREA/OFF-LIMITS PERIPHERY LAND, SEA AND AIR SPACE and cancel permanently all visitor tours and non-essential deliveries to nuclear plants. Reevaluate the location of schools and other public areas within the 10-mile radius.

7. EXTEND THE EVACUATION ZONE FROM 10 MILES TO 500 MILES AROUND REACTORS acknowledging the reality that radioactive plumes can travel significant distances.

8. REQUIRE STOCKPILING POTASSIUM IODIDE (KI) FOR THE PUBLIC in Emergency Planning Zone communities: Stockpiled KI in schools, shelters, Reception Centers, hospitals, nursing homes, and correctional facilities. All residents in the EPZ should have KI available to them in their homes Down-wind communities because of their unique geographic location where evacuation is not possible should be treated like the EPZ.

9. CREATE TRANSPARANCY: Reactor information that affects communities must remain available to the public. The increase in security raises concerns about a meltdown in democracy as NRC and nuclear corporations use terrorism as a means to withhold needed information.

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