

Comments to the TVA Board of Directors, April 14, 2011

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In 2005, FBI director Robert Mueller testified before the U.S. Senate Select Committee on Intelligence saying, "Nuclear power invites terrorism." He called our nation's nuclear power plants "target rich and vulnerable".

A 2009 report from the Union of Concerned Scientists titled "Spent Reactor Fuel Security" says, "Spent fuel is a softer target that could yield graver consequences than an aircraft crashing through the reactor containment structure."

As we are seeing at Fukushima, the 45 foot deep cooling pools must have power to remove the heat produced by the 'spent' fuel rods. If the fuel assemblies are not sufficiently cooled, the pool water heats up and boils. If there is a leak in the pool or if the water boils away, the 'spent' fuel will either melt or catch on fire.

"NRC studies have estimated that many thousands of people living within 50 miles could die from the radiation released when spent fuel assemblies melt or catch on fire." the UCS report says. According to Robert Alvarez, senior policy advisor from the Institute for Policy Studies, "The drainage of a pool might cause a catastrophic radiation fire... which could render an area uninhabitable greater than that created by the Chernobyl accident."

And,"An aircraft—or missile—would not need to completely level the fuel building to cause harm. It would merely need to crack the concrete wall or floor of the spent fuel pool and drain the water out. The spent fuel pool is designed to remain intact following an earthquake, but it is not designed to withstand aircraft impacts and explosive forces."

In 2004, the National Academy of Sciences reported to Congress that U.S. cooling pools are vulnerable to terrorist attacks and catastrophic fires.

In 2010, three nuclear power plants on the Tennessee River were storing about seven million pounds of 'spent' fuel, with over six million stored in pools. Were these pools designed to hold this quantity of 'spent' fuel assemblies?

Although it is more radioactive than the fuel in the reactor cores, this so-called "spent" fuel is NOT being protected with quality containment structures the way reactors are. We at MATRR find this risk unacceptable and we call on the TVA board to be responsible for acting to prevent release of this most poisonous toxic waste.

After only 18 months of service, delivering 1% of their radioactive energy as fuel and 99% as radioactive nuclear waste, these "spent" fuel rods from the reactors are stored in water pools for 5 or more years, so that they can cool down enough to be stored in dry casks.

For some reason, TVA is allowing this dangerous nuclear waste fuel to keep piling up in the cooling pools, moving relatively small amounts into dry storage. At Sequoyah, 74% of this waste is stored in cooling pools, at Watts Bar it's 100%, and 88% of the 'spent' fuel at Browns Ferry is stored in cooling pools.

Both the National Academy of Sciences and the Union of Concerned Scientists have recommended moving 'spent' fuel rods from wet into dry storage for safety reasons. Dry casks are less likely to catch fire and the UCS says that "terrorists would have to break open many dry casks to release the same amount of radioactivity that a single wet pool could release."

It is time for the TVA to spend its money on securing us from the danger it has already subjected us to, not on creating more risks. It is time to improve dry storage security procedures, move all the sufficiently cooled assemblies into dry storage, enclose the dry fuel casks in thick-walled structures or earthen berms capable of withstanding impact from a plane or missile.

If this board thinks the cost of securing 'spent' fuel would be too high, we ask you to consider the catastrophic costs of an accident or attack, the rarely mentioned decommissioning costs that are being forced on future generations, and the human costs of not changing course now. You are simply gambling with our money and our lives.

Nuclear waste stored locally

Sequoyah

1,094 metric tons	[= 2,411,857 pounds]	
812 in pool storage inside the plant	[= 1,790,153 pounds]	= 74%
282 in casks outside the plant	[= 621,703 pounds]	

Watts Bar

315 metric tons	[= 694,456 pounds]	= 100%
All in pool storage inside the plant		

Browns Ferry

1,604 metric tons	[= 3,536,214 pounds]	
1,415 in pool storage inside the plant	[= 3,119,541 pounds]	= 88%
189 in casks outside the plant	[= 416,673 pounds]	

All TVA plants

3013 metric tons	[6,642,527 pounds]	
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TVA data compiled by investigative reporter Pam Sohn of the Chattanooga Times Free Press, March 22, 2010.