



## Dangers of Wet Pool Storage

Pilgrim's nuclear waste, like that from other nuclear power plants around the U.S., was supposed to be sent to a deep geological repository offsite, funded by a fee imposed on electricity consumers. The proposed storage site, Yucca Mountain in Nevada, was cancelled in 2010, and there is currently no other alternative. Entergy's nuclear waste is stranded at Pilgrim and could be there for decades or hundreds of years (or longer!).

Forty years of nuclear waste is stored at Pilgrim. Most of the nuclear waste is stored in a dangerous "wet pool" (aka, spent fuel pool) inside the reactor building.

Pilgrim's original nuclear operating license from the Nuclear Regulatory Commission (NRC) limited the number of fuel assemblies that could be stored in the spent fuel pool. When it became clear there would be no off-site repository, the NRC increased the number. Pilgrim's spent fuel pool was originally designed to hold 880 fuel assemblies, but now – after the 2015 refueling and filling three dry casks – holds 3,162. This is about 4x more than it was originally designed to hold.

The spent fuel assemblies in Pilgrim's pool must be covered with water to prevent a fire that would release huge amounts of radioactivity - enough to contaminate an area more than 100 miles downwind. Water loss in the pool can occur from mechanical failure, human error, acts of malice or the migration of a reactor accident to a pool accident. [A 2006 report](#) to the MA Attorney General states that a large release (100% release) of cesium-137 due to a pool fire could cause up to \$488 billion in damages and 24,000 latent cancers. Damage would extend to Cape Cod Bay.

Storage of nuclear waste in dry casks – while not free of risk – has advantages, such as not requiring mechanical parts or human intervention to function properly. Pictured below is another nuclear facility – and what Pilgrim could look like in the near future. Pilgrim will need more than 100 of these to store all the spent nuclear fuel it will have generated over its lifetime.

