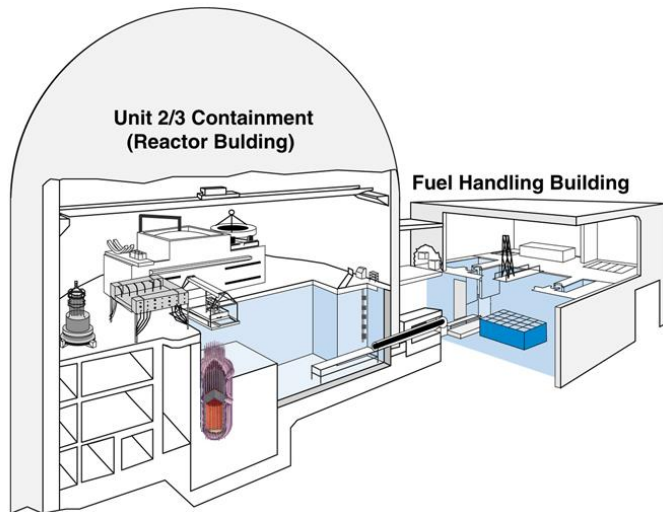
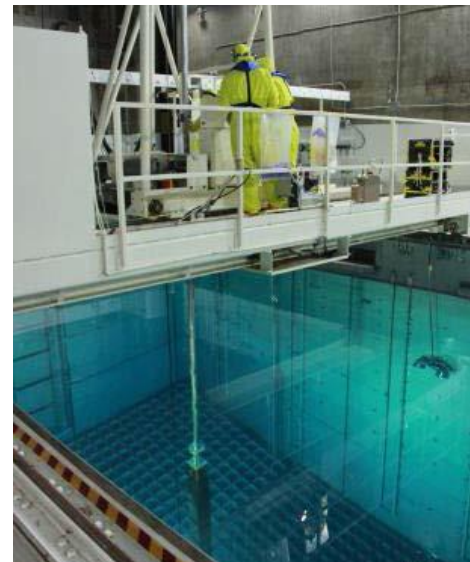


Spent Nuclear Fuel Storage

- All nuclear plants in the U.S. are awaiting federal determination on a national repository
- Spent nuclear fuel consists of assemblies that are made up of fuel rods filled with uranium pellets (the fuel that is used to generate power).
- Spent nuclear fuel at SONGS is stored in either:
 - Enclosed, steel-lined concrete pools filled with water (spent fuel pools) or
 - Sealed steel canisters housed in reinforced concrete structures (dry fuel storage)
- SONGS used more than 4,000 fuel assemblies.
 - Spent fuel pools contain a total of 2,776 assemblies
 - Dry fuel storage modules contain more than 1,100 fuel assemblies
 - A GE storage facility in Morris, Illinois houses 270 assemblies from Unit 1
- No fuel assemblies remain in the reactor cores of Units 2 and 3.
- SONGS' spent fuel pools and dry fuel storage systems are designed to the same seismic standards as other safety-related structures on the site.

Characteristics of Spent Fuel Pools

- The pools have thick walls and floors to provide structural integrity.
- The fuel is submerged in 23 feet of water (from the top of the spent fuel assembly).
- Pool water is recirculated to ensure that cooling is continuously provided to remove residual heat from the fuel and for radiation protection.
- Spent fuel is stored in racks to support the fuel.
- SONGS spent fuel pools were licensed as part of the original license for Units 2 and 3.



Characteristics of Dry Fuel Storage

- Involves sealing spent nuclear fuel in airtight steel containers or casks that provide both structural support and radioactive shielding.
- Cannot be transferred to a dry fuel storage module until it has cooled in a pool for approximately 5 to 7 years.
- Designed to withstand various natural phenomena including floods, projectiles from a tornado, seismic events, temperature extremes, and lightning strikes.
- Necessary until a permanent spent nuclear fuel repository has been developed by the federal government.
- Must meet strict design and performance specifications prior to being certified by the NRC.
- Currently consists of 51 dry storage modules that contain spent nuclear fuel from Units 1, 2 and 3.

