

## Onsite storage of spent nuclear fuel

## Small impact (Category 1).

The expected increase in the volume of spent fuel from an additional 20 years of operation can be safely accommodated onsite with small environmental effects through dry or pool storage at all plants, if a permanent repository or monitored retrievable storage is not available.

I cannot see how this could be a “Generic Issue”. The NRC’s argument for “generic” is circular. The issue is: what is safe at what plant. If the NRC predetermines that prolonged on-site storage is safe at all plants, then there is no point to take public input. By allowing the utilities to fill the pools way beyond the original licensed capacity, the NRC has allowed a doubling of possibilities for nuclear catastrophe, i.e. a meltdown and a pool fire. [NOTE: Until the year 2000, the NRC did not even officially recognize the possibility of such spent fuel pool fire].

### 1. Safe accommodation.

At SONGS and Diablo, the earthquake and tsunami dangers are completely different from any other plant. The same is true for terrorist aspects for any plant, because of location and/or design [see Finding 3D National Academy of Sciences Report (NAS) on terrorism aspects for Spent Fuel Pools, 2005. Quote: “The potential vulnerabilities of spent fuel pools to terrorist attacks are plant-design specific. Therefore, specific vulnerabilities can only be understood by examining the characteristics of spent fuel storage at each plant”].

Furthermore, another 20 years of exposure to intense radiation and heat will likely cause further “embrittlement” of components, such as pool racking and/or fuel cladding. The g-forces generated in earthquakes depend largely on the strength of the quake and the distance from the epicenter. This aspect alone could require very different mitigation measures at different plants. For instance, the dry casks at Diablo are bolted to the storage pads but not, to my knowledge, at any other plant.

Accordingly, the “safe accommodation” of spent fuel storage on-site depends on different mitigation measures at each site and must therefore be evaluated in a site-specific EIS.

### 2. Small environmental impact.

A pool fire or breach of a dry cask are not “small environmental impacts”. In fact, some of the NRC’s own studies identify a pool fire as potentially having “comparable consequences” to a reactor meltdown. The NAS report finds, that a pool fire is possible and that such a fire could result in releasing large amounts of radiation to the environment, hardly a small impact. Moreover, the NAS report suggests a host of possible mitigation measures, depending on “site by site” evaluations. Such measures could include lower pool density, reconfiguration of SFA’s in the pool racking, additional sprinkler systems etc., all depending on different conditions at each plant (NAS Report Finding 3D, page 6). Even more important, conditions may change. Another fault was just recently discovered near Diablo, terrorists might get access to new, more destructive weapons, etc.