

Texas Radiation Advisory Board's Advisory Statement on
Storage of Spent Nuclear Fuel in Texas

Based upon the following considerations, the Texas Radiation Advisory Board's (TRAB's) position is that the state of Texas should request that the Federal Government consider Texas to be a site for a consolidated Spent Nuclear Fuel (SNF) storage facility. It is advantageous to Texas to have the storage site in the state so the activities can be directly regulated.

Since the US is going to establish consolidated SNF storage facilities in the United States, transportation through Texas will occur whether a site is located in Texas or not. Other states, including New Mexico, have already requested to be designated for these storage sites. Therefore, establishing SNF storage in Texas will not increase transportation of SNF through Texas.

There is likely public support for sites in Texas, in locations where the public is already educated on radioactive waste storage and understands how safety is ensured, and where the citizens understand the financial benefits of having a storage site in their communities.

The TRAB believes that it is in the state's best interest to request that Texas be considered by the Federal Government as a consolidated SNF storage site.

The Blue Ribbon Commission on America's Nuclear Future (BRC) was formed by the Secretary of Energy at the request of President Obama. The BRC issued a report in January of 2012 that had 8 recommendations, including one for prompt efforts to develop one or more consolidated Spent Nuclear Fuel (SNF) storage facilities.

The Texas Commission on Environmental Quality (TCEQ) issued an Assessment of Texas's High Level Radioactive Waste Storage Options in March 2014. Following the issuance of this assessment, the Governor of the State of Texas issued a letter to the Texas Lieutenant Governor and the Speaker of the House urging that Texas begin looking for a safe and secure solution for High Level Waste in Texas.

Commercial nuclear power began in the late 1950s with the expectation that SNF would be reprocessed and High Level Waste (HLW) disposed of at a federally owned and operated facility. Reprocessing would result in a much reduced quantity of HLW. In the late 1970s, President Jimmy Carter issued a presidential directive that prohibited commercial reprocessing. President Reagan canceled this ban in the early 1980s. Even though the ban has been lifted, reprocessing is not competitive financially with the one-time fuel cycle.

Congress passed the Nuclear Waste Policy Act (NWPA) in 1982 to develop a geological repository for the disposal of SNF. This resulted in the Department of Energy (DOE) entering

into agreements with nuclear power plants that promised to have the DOE take responsibility for disposing of SNF starting in 1998. This was financed by nuclear plants paying \$1.00 per megawatt generated. A 1997 amendment to the NWPA designated the Yucca Mountain site to be characterized for the geologic repository for SNF. Licensing of the Yucca Mountain site has been delayed or stopped.

Nuclear Utilities have no choice but to store SNF on their plant sites. SNF is stored first in spent fuel pools and later in Dry Cask Storage. Both are safe but not an adequate long term solution.

In Texas, there are 2 commercial reactors at Comanche Peak near Glen Rose and 2 commercial reactors at The South Texas Project near Bay City. Both sites are storing all of their SNF in spent fuel pools and in dry cask storage at their site.

Those that oppose having a consolidated storage facility in Texas will cite several concerns. The primary concern will be the radiation safety and security of the transportation and storage of SNF in Texas. Anti-nuclear power advocates may believe that establishing this storage site in Texas will encourage and support additional commercial nuclear power reactors in the US or Texas.

The Nuclear Regulatory Commission (NRC) has performed risk calculations on storage of SNF at plant sites in both wet and dry storage and determined that both methods posed an acceptable risk. However, it was never envisioned when plants were constructed that SNF would be stored on the site for an indefinite period of time. Unless the federal government fulfills their responsibility to take SNF, the sites will be storing SNF long after the plants are decommissioned. Although storing SNF on plant sites is safe, from a risk perspective, it is safer to store SNF at a consolidated storage facility.

Transportation casks that are certified by the NRC would be used to transport SNF. These casks would be tested to ensure safety during shipping even when subjected to conceivable accident scenarios. Transportation infrastructure and regulations will be further modified to ensure safe transport of SNF.

In addition, locating a consolidated storage facility in Texas, rather than elsewhere in the US, only follows the BRC recommendation. It does not further encourage or discourage the development of additional nuclear power.