HOLTEC RADIOACTIVE WASTE SITE – NO SCIENTIFIC JUSTIFICATION

The Nuclear Regulatory Commission plans to "temporarily" store the nation's 100,000 metric tons of accumulating high level nuclear reactor waste at the Holtec site between Hobbs and Carlsbad. The planis driven by political and economic considerations that lack scientific justification. The facility promoters don't mention that they are dooming New Mexico to have to permanently dispose of the spent nuclear in-state. There is magical thinking that a disposal facility will be opening soon, i.e. Yucca Mountain, a porous mountain located above groundwater.

There are compelling technical reasons as to why the nuclear waste would never leave New Mexico. The near surface waste containers at Holtec will be damaged from heat stress, corrosion from chlorides, radiation and chemical effects from leaking spent fuel. Holtec and dry fuel storage sites around the U.S. so far have no way to effectively inspect canisters for cracking before shipping.

Holtec has no approved provision for isolating canisters leaking radionuclides and no way to transport compromised canisters elsewhere a second time. Other states would object. Even if a permanent repository is opened it may not be able to accept all the spent nuclear fuel that has accumulated at Holtec and other sites.

The NRC environment statement only considers 40 years of storage whereas the Holtec application admits that 120 years may be required. The environmental statement ignores the realities of imminent — perhaps within two decades — fuel storage canister failure due to chloride-induced stress corrosion cracking or other manufacturing vulnerabilities.

At the San Onofre, California site, Holtec made unapproved design changes to canisters. Holtec has no way to replace aging concrete structures or damaged spent fuel canisters for a second transport. There is the possibility for hydrogen explosions due to air leaking into damaged canisters or criticality from water entry into high burnup fuel.

The New Mexico Auditor General is investigating kickback allegationsrelated to the Holtec site contract.

The Holtec site is an area threatened by underlying unstable geological and hydrogeological characteristics along with the possibility for fracking-induced earthquakes. The area's karst formations, readily penetrated by groundwater, cannot prevent migration of radionuclides from damaged containers or canisters. Decades of oil and gas drilling, potash mining and abandoned water wells have resulted in mining-induced ground deformation – the ongoing collapse of strata, subsidence, sinkholes and dissolving salt deposits. A large playa lake lies on the eastern portion of the site.

Holtec is near the world's purest potash deposit that includes potassium chloride. The Holtec study of dry storage risks omitted accidents involving canister leakage from chloride induced stress corrosion cracking. There is no technical reason for the U.S. NRC to have ignored it.

Radiation exposure from rail transport of the spent fuel to Holtec poses a public health risk. Just one of the 10,000 shipping containers of spent fuel will contain more radiation than all the nuclear weapons waste disposed of at WIPP. Train derailments are all too frequent. Railway transport for the 100 ton containers would be over a track, tunnel and bridge infrastructure that is beyond its useful life.

The U.S. NRC fails to acknowledge many compelling epidemiology studies showingmore harm than accepted radiation protection standards predict. The public along rail transportation corridors and the misinformed radiation workers will be receiving life shortening radiation doses even when below allowable radiation standards. Weakened immune response, cancer, birth defects can result.

New Mexico may be forced to allow burial of the spent fuel in underground salt.The half mile deep WIPP salt mine experienced a $2,000,000,000 fire and explosion shutdown due to human error.

The 1982 Nuclear Waste Policy Act directed deep geological disposal of spent nuclear fuel based on Congressional intent that isolation from the biosphere required a onetime removal from the nation's 100+ nuclear utility sites, notsecond shipping from an interim site.

New Mexico should not be forced to become a permanent host for nuclear waste that remains radioactive for millions of years.