SEIS Testimony for 9/15/15

Federal Register: The scope of this supplement is limited to the potential environmental impacts from the proposed repository on groundwater and from surface discharges of groundwater.

We are told that this is a narrow scope but I don’t accept that. At Yucca Mountain, it is all about groundwater. A Yucca Mountain repository would either work, or not because of groundwater. The only question to be answered is: Can waste emplaced in Yucca Mountain be isolated and not contaminate the groundwater? The answer is “no.”

Soon after Site Characterization began it was established by State of Nevada scientists that the DOE guideline for groundwater travel time was violated at the Yucca Mountain site. Groundwater moves from the repository footprint to the accessible environment in less than 1,000 years. Even with the keyhole shaped adjustment (created specifically for Yucca Mountain by the EPA) to the allowable contamination zone, that provides 13 extra km for dilution, the groundwater travel time disqualifier is violated.

So in 1989 Nevada’s Governor Miller wrote to the DOE Secretary saying that the site should be disqualified. It was not. In 1999 outgoing Governor Miller and incoming Governor Guinn again wrote stating the reasons for disqualification but were denied. Their arguments were not ignored and in fact were acted upon two years later. In 2001 the DOE Guideline’s disqualifying conditions for repository siting were eliminated. Problem solved!

With the guidelines no longer a problem, the DOE submitted the Yucca Mountain Site Recommendation in 2002, along with the EIS. We are here to give statements regarding the Supplement to that EIS.

Six years later than required by law, in 2008 the DOE submitted a License Application for a construction authorization to the NRC with an EIS supplement. Both the Site Recommendation and License Application were based on a repository with comingled defense and commercial waste. The design was based on specific packages (TADs) for transport, aging and disposal of the waste that would regulate the heat and ultimately affect releases from the repository to the groundwater.

Today, in 2015 there is no TAD. Those very specific containers never got off the design drawing board and were never built. But, the release rate of radionuclides to
the groundwater, as estimated in the Total System Performance Assessment, is dependent upon the TAD waste package being used.

Also, it is now six months since a Presidential Memorandum, which has the force of law, was issued stating that defense and commercial waste cannot be placed in the same repository. But the design of a Yucca Mountain repository has not been changed even though the cooler defense waste is relied upon in the release estimate, to moderate the heat output in the repository. Without the TAD and the cooling effect of the defense waste, the NRC’s SEIS has no credible technical basis to analyze the impacts of radioactive contaminants on groundwater and groundwater discharges in the region.

If Yucca Mountain is to be considered for a license, there needs to be a new Site Recommendation, a new EIS and new License Application from DOE. Then a new acceptance review for each of those must be done by NRC and also a new Safety Evaluation Report.

Finally, Nevadans and people in reactor communities know and communicate with each other. NRC keeps assuring all of us that we can trust their complete objectivity and dedication to long term safety. But just in the past few days people living near reactors have learned that NRC has canceled a study to examine, for the first time since its flawed 1990 study, the long term cancer risk to their communities' residents. NRC said the $8 million cost of the study was too much. That's the same amount NRC just recently spent on its Yucca Mountain Safety Evaluation Report that is known to be based on incomplete information and obsolete assumptions. Nevadans can learn all we need to know about NRC’s actions by watching reactor communities.