

Comments of Nuclear Information and Resource Service
on the U.S. Department of Energy Draft Supplemental Environmental Impact Statement for a
Geologic Repository for the Disposal of Spent Nuclear Fuel and High-Level
Radioactive Waste at Yucca Mountain, Nye County, Nevada
(Draft Repository SEIS)

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My name is Aja Binette I am the Economics Campaigner with Nuclear Information and Resource Service (NIRS).

NIRS appreciates that the Department of Energy recognizes that since the Yucca Mountain plan is changing it is necessary to reopen a process under the National Environmental Policy Act (NEPA) and therefore engage with the public. Thank you for this opportunity to comment.

NIRS has members in all 50 States and will be alerting our membership as well as the public of this opportunity to comment on the totality of a plan that has the potential to impact so many people because it will:

- Impact highly radioactive waste handling and storage at 72 sites around the country
- Potentially impact tens of millions of people living in communities where the transportation of highly radioactive waste would become a common-place event
- Result in unlimited taxpayer and intergenerational impacts as this program offers justification for the continued production of more highly radioactive waste because of the perception of “confidence” in a “solution” for a portion of the waste generated
- Serve as a beacon of “majority rule” over self-determination as a State in this fine Union and Indigenous Tribal Nations are treated as if they have no sovereignty to reject the biggest pile of the longest lasting deadly garbage ever created by this species – and in the process given front-row seats while science and human decency are “bent” to the will of political expedience and corporate profits – once again

Unfortunately Yucca Mountain is a study in undermining democracy; it is not a solution to highly radioactive waste. Nuclear Information and Resource Service respectfully submits once again (NIRS first did so in 1998) that Yucca Mountain will not meet the stated goal of providing isolation of highly radioactive waste from the environment. Had the guidelines for the suitability of a repository – mandated in law – been applied, the site would have been disqualified.

It remains a fact that then Secretary of Energy Richardson agreed with Nuclear Information and Resource Service and the more than 200 organizations that petitioned the Secretary to disqualify Yucca Mountain as a prospective nuclear waste dump on the basis of solid physical evidence that the site would leak – and faster than the guideline. Unfortunately that Secretary bowed to political pressure and did not act to implement the law and disqualify the Yucca site. It would have taken great courage to start the process over to find a credible site for the isolation of highly radioactive waste – it is sad that we do not have a hero backed by a government to do that.

It is not too late – the physical reality of the site had not changed: the compressed ash that passes for “rock” is still fractured – the water still travels through the formation in less than 50 years – let alone 1000.

There is no waste in the ground at Yucca Mountain today – nor should there ever be. Why? Because of the potential for geologic eruption from the hot-spot known to be below the site. Witness the earthquake fault lines, the near constant quaking of the site. Witness the row of lava cones, the youngest proximal to the planned highly radioactive waste dump is sufficient evidence. A team of scientists studying crustal expansion with the state-of-the-art GPS satellite technology supported this evidence more than 10 years ago...and the Shoshone people could have told DOE from the start – the name they gave this ash formation long ago translates in English as “Serpent Swimming West.” One would have to go far and wide to find a worse place to dig a hole and put this society’s biggest burden for “safe keeping.”

Imagine you were in a car crash that was very expensive. What if your insurance company paid you for damages based on the probability that the crash would happen – and reduced the payment by the probability that the crash would happen on that GIVEN DAY. Voodoo math? Well, this is the formula for dealing with the radiation doses that would happen in the event of a geologic eruption through the waste in a Yucca dump. When it comes to the worst waste ever made, Voodoo math and science is not good enough!

A major change in the plans for proceeding with a dump at Yucca Mountain is the inclusion of a fuel-pool-to-dump canister. Previously called a “Multi-Purpose Canister” or MPC, the Transportation, Aging and Disposal or TAD is an effort to streamline the waste handling process at the dump – however it does so at the expense of the reactor communities and transportation corridor communities. While decreasing the number of shipments does reduce the risk of accidents, the overall handling of the packages is more challenging and the consequences of mishaps greater. The stated goal – not having to handle the irradiated fuel more than once -- may also be misplaced. Increasing anecdotal evidence indicates that the durability of fuel rod integrity may be far shorter than imagined. Department of Energy projections assume that piles of fuel pellets in the bottom of a container is an event in the distant future – if that proves not to be the case, handlers seeking to intervene may be hindered by containers that are welded shut. Lessons learned on welded containers in Michigan include the inclusion of shims and other arts of the welder’s trade that proved very difficult to reverse.

The SEIS needs to include an assessment of the impacts on reactor site waste handling, reactor site waste storage, the pros and cons of welded versus bolted lids on the containers – including the history of extreme difficulty in reopening the containers – and the impact of the larger container size and therefore heavier haul in road transport – since there is no assurance that rail would be used exclusively – particularly since there is no rail access to Yucca. The prevalence of heavy-haul nuclear shipments on the roads today suggests that over time such could occur with TADs.

The SEIS also needs to consider the risks associated with a second round of waste handling at reactor sites currently using dry casks since it is not likely that they will qualify if a uniform TAD design is required. The SEIS should specify what that policy would be – and if reloading

would be mandated, then on a case by case basis, consider every unique reactor site and existing cask design. Part of the evaluation should be the projected state of the fuel pool at the time such handling would occur. Cask loading constitutes a high-risk activity in relation to fuel pool integrity. Incidents have already come close to accidents that could have resulted in fuel pool drain-down at reactor sites in Michigan and Minnesota.

DOE offers no meaningful alternative to the proposed TAD canister system.

NIRS supports the comments by Kevin Kamps from Beyond Nuclear offered today on transportation impacts and will offer more detailed comments on the SEIS and also the other two documents offered for comment:

Draft Supplemental Environmental Impact Statement for a Geologic Repository for the Disposal of Spent Nuclear Fuel and High-Level Radioactive Waste at Yucca Mountain, Nye County, Nevada –Nevada Rail Transportation Corridor (Draft Nevada Rail Corridor SEIS)

Draft Environmental Impact Statement for a Rail Alignment for the Construction and Operation of a Railroad in Nevada to a Geologic Repository at Yucca Mountain, Nye County, Nevada (Draft Rail Alignment EIS)

Respectfully Submitted,

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