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Dr. Jane Summerson,
EIS Document Manager (M/S 010)
Yucca Mountain Site Characterization Office
DOE – Office of Civilian Radioactive Waste Management
P.O. Box 30307
North Las Vegas, NV 89036-0307

Dear Dr. Summerson,

I am submitting the following comments on the Supplement to the Draft Environmental Impact Statement for a Geologic Repository At Yucca Mountain.

1 I am strongly **opposed** to the proposal to store irradiated fuel rods from commercial reactors at Yucca Mountain. Many scientists question the safety of that location for a geologic repository. There is evidence of groundwater movement through the proposed site of the vault, which could potentially lead to contamination of the underlying aquifer.

2 The site also has 33 known earthquake faults and a known volcanic field is only ten miles away.

3 I understand that one proposal is to store fuel in as many as 4,500 dry storage casks on the surface of the site to allow the fuel to cool. In 1992 an earthquake caused $1.5 million damage to a DOE research facility at the site. I hate to think of the chaos that another quake would cause if one occurred while the casks were stored on the surface. Or if a volcano erupted. Would all those casks have to be moved again, and a new site

4 located and developed. Or consider the consequences of the corroding casks within the repository subjected to seismic trauma or volcanic eruptions.

5 In addition to the instability of the site, there are serious concerns about the stability of the irradiated fuel rods within the casks. I remember when the melted Three Mile Island fuel was transported to Idaho. Recombiner catalysts were installed in the top and bottom of the canisters to prevent the buildup of a flammable gas mixture or internal pressure within the cask, and to prevent a fire or a hydrogen explosion from occurring. The catalyst was intended to combine the radiolytically-generated hydrogen and oxygen gases released from the residual water entrapped within the fuel back into water in order to prevent the formation of combustible or explosive gas mixtures. However, I understand

6... that the catalyst cannot function if submerged in water. On the other hand, fine particles of zirconium, from the fuel rod cladding, must be kept either virtually dry or completely submerged if an explosion or spontaneous ignition is to be prevented. This seems a rather precarious technology. Storing the waste in a geologically unstable environment

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6 cont only adds to the chances of a cataclysmic failure and the potential for release of highly radioactive materials to the environment.

7 I also **oppose** putting the casks in motion on the nation's crowded highways! There have already been accidents many involving vehicles transporting irradiated fuel rods. With a shipment on the average of every other day for the next 30 years, the chance of a fiery crash involving, say, one of today's larger trucks, traveling at or above today's speed limit, containing a cargo of highly flammable chemicals becomes much more likely. The result could be a crack in the cask or a melted o-ring due to an explosion or an exceedingly hot fire lasting up to an hour or more, and the release of radiation to the environment, and human exposure – on a crowded highway, in front of an office park, or beside a residential neighborhood or school. Shipping these wastes on today's crumbling and crowded highways is a very bad idea.

8 Shipping them by rail is also a bad idea. On May 15th, simple human error resulted in a runaway train; on May 31, a faulty part – a broken axel – caused a derailment of 14 coal cars, in a residential neighborhood here in the St. Louis area; last year a train derailed right below our state capital building in Jefferson City!

9 The fuel rods should remain at the reactors where they were generated until they are much cooler than they are today, and until a really safe location is found for a storage site. Or until a technology that can neutralize radiation is found, which not very likely I'm afraid. In the mean time, we must stop generating more of this waste! Nuclear power is hazardous to our generation and will continue to be for generations to come. It is as inherently dangerous as the nuclear weapons industry that spawned it.

10 We need the Department of Energy to develop renewable, efficient, clean electrical power systems such as hydrogen fuel cells, and solar and wind generators.

Sincerely,

Rebecca M. Wright