Rebuttal to Natural Resources Journal Environmental Ethics Manuscripts by Noah Sachs

Scott Northard

Recommended Citation
Available at: https://digitalrepository.unm.edu/nrj/vol36/iss4/10
SCOTT NORTHARD

Rebuttal to Natural Resources Journal Environmental Ethics Manuscript by Noah Sachs

The article by Noah Sachs takes issue with the merits of a privately developed and financed spent nuclear fuel storage facility, but because of preconceived notions, falls short in analyzing several important aspects of the project. In this rebuttal, I address issues related to the utility involvement in the joint Mescalero Apache Tribe/Utility project, and leave the Mescalero Apache Tribe to address tribal issues.

RESPONSIBILITY FOR LONG-TERM STORAGE AND DISPOSAL OF SPENT NUCLEAR FUEL

The article states that the MRS would have "taken the pressure off the federal government to seek sound long-term solutions to the waste problem." Nothing could be further from the truth. The assertion ignores the fact that thousands of tons of spent fuel and high-level wastes from the United States weapons program currently are stored in government research facilities which are overcrowded and in poor condition. This situation alone warrants a near-term solution by the government. While commercial spent fuel currently is being stored more safely at commercial nuclear power plants, the number of facilities nearing loss of onsite storage capacity is growing. It is estimated that by 1998, 26 of the nation's 110 nuclear power units will have to build additional onsite storage. The Mescalero project only represented a portion of these plants, so unrelenting pressure by the others can be expected to continue until a permanent solution is developed.

The proactive approach by the Tribe and utilities in trying to resolve this pressing issue would have benefited the nation and should not be discouraged. The private project had already made a significant impact in helping the federal government more accurately scope and design the eventual federal interim storage facility. One could also argue that progress with the private fuel storage initiative eventually would have benefited the federal government by publicly demonstrating the safety and economic viability of centralized interim storage. Moreover, the private project also would have demonstrated the feasibility of a safe and effective large-scale spent fuel transportation program and publicized the outstanding safety record of the already extensive commercial spent

* Scott Northard is a spokesperson for Northern States Power Utility Co., Minnesota.
fuel shipping history. In addition, the private project already had helped raise the awareness of the public and Congress to the need for an effective long-term storage and disposal program, and showed that it is sound national policy to build one centralized storage facility, rather than storing the fuel at over 72 separate sites throughout the country.

As a public policy issue, the Mescalero project wouldn't challenge or impede federal responsibility in any way. It is the clear, legal responsibility of the federal government to accept spent fuel, beginning on January 31, 1998, according to the contracts signed by the Department of Energy (pursuant to the Nuclear Waste Policy Act of 1982) and the individual utilities. The U.S. Court of Appeals recently affirmed this responsibility.1 It is also the responsibility of each utility to safely store and manage the spent fuel until the federal government takes it. In order to appreciate these responsibilities, it is important to understand several points:

- Under the contracts, the timetable for the transfer of fuel is determined by the age of the fuel; that is, the Department of Energy (DOE) will take the oldest fuel first.
- For technical reasons, each utility is required to always have available storage space to off-load a full core of fuel.
- The utilities with the oldest fuel are not always the ones that are running out of storage space in their spent fuel pools.

In some cases, the utilities with the greatest need for additional storage will have to wait their turn before the federal government takes the fuel. Therefore they will be responsible for finding additional storage space, in new storage facilities either on-site or off-site.

One additional factor: under current contracts between the federal government and the utilities, the DOE is obligated to accept only standard-size fuel. This requirement postpones acceptance of fuel from some facilities, including some older plants and decommissioned units.

Projects such as the Mescalero interim storage facility would allow utilities to meet their obligations in light of the federal government's apparent inability or unwillingness to meet its required schedule to take the spent fuel. Because of the continued expense related to the long-term stewardship of the spent fuel either onsite or at the Mescalero facility, utilities and their customers would continue to press the federal government to assume its obligation at the earliest possible date, whether or not a private spent fuel storage facility exists.

Finally, all nuclear power plants eventually will be permanently shut down for decommissioning and dismantling after they are no longer

---

economical to operate. In order to fully restore the plant sites to their original state or convert them for other purposes, the spent fuel must be removed. Currently, there are over 15 permanently shut-down plants with spent fuel stored on-site in the U.S. As more and more plants are permanently shut down, all plant owners and utility customers will continue to pressure the federal government to remove the spent fuel for long-term storage and disposal at a federal facility.

MANAGING THE RISKS OF STORING AND TRANSPORTING SPENT NUCLEAR FUEL

The article states that, "thousands of residents of New Mexico would have suffered harms as a result of the facility . . . includ(ing) health and safety risks from accidents along transportation corridors . . . as well as negative economic impacts and declining values from the public stigma associated with nuclear waste". This assertion clearly flies in the face of reality and documented experience.

Experience, precaution and oversight are key elements in handling spent fuel. Experts know how to handle radioactive materials safely, because they have more than 35 years' experience. Some 100 million packages of hazardous materials are shipped each year in the United States. Spent fuel shipments make up a very small percentage of those shipments. In fact, over the past 35 years, some 2,400 shipments of commercial U.S. spent fuel have all been moved safely, not to mention thousands of military shipments that occur routinely, out of public scrutiny. Scientists and engineers know that, although it is very unlikely, accidents can happen. So they designed containers for transportation and/or storage that will not break open or leak even under severe accident conditions. Spent fuel containers have been tested under very harsh conditions at the Sandia National Labs in New Mexico, withstanding high speed crashes, drops onto sharp objects, jet fuel fires, and underwater submersion, all without any leakage.

Past experience with nuclear facilities shows they tend to improve the economic base of the communities in which they are located. Indeed, New Mexico has benefited greatly from the presence of the two highly regarded national laboratories and the many military installations in the state, many of which are routinely handling nuclear waste as well as nuclear weapons. Nearby communities have prospered greatly from the jobs, tax benefits, the purchase of goods and supplies and infusion of brainpower the labs and bases attract.

A recent study found that several communities in different parts of the country that hosted nuclear waste facilities and nuclear power plants all flourished after the facility was built. Income levels, real estate values, and all other measures of economic prosperity grew at rates
exceeding other comparable areas in the state. Contrary to the conclusions reached in the article, the facilities tend to serve as strong economic bases for communities.

The article asserts that the partnership with the Tribe "could have allowed utilities to skimp on some safety measures and procedures during construction and operation." This is totally untrue. Because all spent fuel storage facilities are required to meet a host of stringent federal regulations, regardless of their location on public, private or Indian lands, this facility would not have skimped on any regulations. Indeed, the Mescalero Apache Tribe had added several constraints on the facility operation that substantially improved its already-safe design features. The utilities, as partners with the Mescalero Apache Tribe, also had committed to be an integral part of the construction, licensing and continual operation of the facility, using their vast knowledge and experience in handling spent fuel to ensure safe and reliable operation.

All aspects of shipment and storage of spent fuel would be regulated and monitored closely by experts from nuclear power plants, emergency responders, and local, state and federal officials. The Nuclear Regulatory Commission, which will monitor and regulate any interim storage facility, already had augmented its staff to deal with this first-of-a-kind project, which would be subject to worldwide scrutiny by the public, the industry, the international scientific community, and the news media.

THE ECONOMICS OF CENTRALIZED INTERIM STORAGE OF SPENT NUCLEAR FUEL

The article challenges the economic basis for an interim storage facility, and states, "there were not likely to be monetary savings from an MRS facility". The Mescalero project Business Plan debunks this notion. It shows that, due to the significant economies of scale, the project costs were competitive with the utilities' current on-site storage alternatives. It should come as no surprise that building one large facility instead of 72 smaller ones would result in substantial savings, even when transportation costs are included. It has been estimated that if all of the nation's nuclear plants have to build additional spent fuel storage at their sites, it will cost electricity consumers $7.7 billion.

The decision by the utilities to send fuel to a centralized facility was not made in a vacuum. Nuclear utilities are heavily monitored and regulated companies. Operational and business decisions are reviewed and, in many cases, approved by regulatory authorities, including state public utility commissions. Utility decisions and the state and federal oversight also are scrutinized throughout.
Participation in the Mescalero Project was a prudent business decision. The article uses the notion that "utilities and their customers would have paid twice" as an argument against the facility. The payments utilities have been making into the Nuclear Waste Fund for the DOE program have now reached over $12 billion since 1982. While customers do not want to pay for spent fuel storage twice, they would have to pay for additional on-site storage, or pay to store the spent fuel at a centralized facility. The economics of a single, centralized facility are favorable compared with building a stand-alone dry-storage facility at each site, even when transportation costs are included. Clearly, utility customers would prefer the lower cost approach.

CONCLUSION

The article concludes that one of the "most compelling arguments against the Mescalero MRS (was) that it harmed U.S. nuclear waste disposal policy." The federal government has made painfully slow progress in developing a centralized storage and disposal facility. Utility customers have paid more than $12 billion in fees to the federal government. It is evident that the date for an underground repository has slipped past 2015. Any progress made by the private sector would benefit the federal program by showing how it should be done. The Mescalero Apache Tribe and the utilities should be commended for stepping forward to help address this pressing national issue, not condemned for trying to damage a failed or inadequate U.S. national policy. Arguing that solving the problem with private sector involvement takes the pressure off Congress to find long-term federal solutions to the waste problem is tantamount to saying we should leave all our difficult issues alone until they become horrible disasters, then Congress will act. Nonsense. Our country needs action now, before it is too late.