

## **Testimony of the Hon. John Shimkus, Illinois-15**

Thank you, Madame Chair, and Members of the Energy and Water Subcommittee for allowing me the opportunity to testify before you today.

As you know, I am here in support of funding levels in the President's Budget request for nuclear waste disposal. This request includes \$116 million for nuclear waste disposal, and specifically \$38.5 million in the Nuclear Regulatory Commission's Nuclear Materials and Waste Safety Program for related activities at Yucca Mountain.

Starting with the Manhattan Project and the creation of our nation's nuclear energy defense and civilian programs, long-lived nuclear waste has been generated which must be permanently disposed of. Since the National Academy of Sciences (NAS) issued their first report in 1957 on nuclear waste disposal options, the international scientific community has consistently concluded that permanent disposal in a deep underground repository is the best approach to dispose of nuclear waste.

In 1954, Congress passed the Atomic Energy Act, authorizing civilian, commercial use of nuclear power. In doing so, the Federal government permitted private entities to generate spent nuclear fuel (SNF). In so doing, the Federal government recognized its obligations to develop a solution to permanently dispose of the material.

From 1964-1971, the Atomic Energy Commission (AEC) – which oversaw all aspects of generation, regulation, and licensing of civilian nuclear facilities – began pursuing a disposal site in a salt formation located in Lyons, Kansas. After subsequent scientific analysis, the site was found to be unworkable. Additionally, the State government lost trust in the AEC and chose to

discontinue their work on a nuclear waste disposal site in Kansas. After this, the AEC formally terminated the project in 1971.

Then, from 1971-1982, the Federal government, through the AEC and subsequently the Energy Research and Development Administration (ERDA), considered a wide variety of options relating to nuclear waste management, including the “Retrievable Surface Storage Facility” (RSSF), to serve as a consolidated interim storage site, and the “Nuclear Waste Terminal Storage Program” (NWTSP) to site a permanent repository.

In 1974, ERDA terminated the RSSF program primarily due to objections raised by the Environmental Protection Agency (EPA). EPA opposed the program out of concern that it would ultimately become a de facto repository due to cost considerations and distract ERDA from the development of a permanent disposal facility.

The NWTSP attempted to site a permanent repository through a process of identifying technically suitable sites and then working through the respective State governments. In 1976, NWTSP notified 36 States of site consideration and requested to work with those Governors to conduct site characterization activities for a repository. Ultimately, no Governors agreed to participate in the program.

During this time, ERDA and DOE conducted extensive scientific and technical evaluation of the viability of the Nevada Test Site. This included a demonstration research project, in which SNF was emplaced at the site, gathering information to help prove SNF could be disposed of in the geologic conditions that are present at the Yucca Mountain site.

After concerns over the AEC's effectiveness in light of the loss of public trust relating to the failed Lyon's Kansas disposal program, Congress passed the Energy Reorganization Act in 1974, which abolished the AEC. The regulatory functions for nuclear material were then assigned to the newly established Nuclear Regulatory Commission (NRC) and policy initiatives were assigned to ERDA. In 1978, Congress finally established the DOE and transferred the legacy responsibilities for nuclear waste from ERDA.

In 1982, Congress enacted the Nuclear Waste Policy Act (NWPA), which established the Office of Civilian Radioactive Waste Management within the Department of Energy (DOE), and entrusted them with the responsibility of developing a deep geologic repository for disposing of spent nuclear fuel and high-level radioactive waste. Additionally, the NWPA also included a fee for service funding model, under which ratepayers who received electricity generated by nuclear power paid into a fund to provide for the disposal of spent nuclear fuel. The NWPA also established requirements for State participation in the process, including a formal disapproval mechanism with ability for Congress to override the State.

Then, in 1985 pursuant to Section 8 of the NWPA, President Reagan made the determination that high-level radioactive waste from defense activities should be "co-mingled with commercial SNF for permanent disposal. Congress then began appropriating funding from the national defense budget accounts to pay for the portion of the Yucca Mountain costs attributable to defense waste. Through 2016, taxpayers have paid \$3.6 billion from the defense budget accounts for the Yucca Mountain project.

From 1983-1987 DOE conducted multiple analyses to evaluate the site characteristics at different locations, and Yucca Mountain was consistently rated as the best technically suited site among those studied sites. In 1987, out of concerns about the costs and time delay associated with continuing to study multiple locations, Congress enacted the Nuclear Waste Policy Amendments Act, which redirected DOE's nuclear waste management activities to focus solely on the Yucca Mountain site.

Over the next 15 years extensive scientific research was conducted on the Yucca Mountain site, led by DOE National Laboratories. During this time, the EPA updated regulatory requirements for Yucca Mountain to set potential release limits for up to one million years. In February of 2002, the DOE finally released their Environmental Impact Statement (EIS).

Following a formal recommendation submitted by the Secretary of Energy, President Bush formally recommended the Yucca Mountain site to host a repository. Nevada Governor Guinn submitted the State's disapproval to the Federal government and Congress subsequently followed the process established by Section 115 of the NWPA to approve of the Yucca Mountain site. The House of Representatives voted 306-117 to approve the Yucca Mountain site, and the Senate passed the resolution by voice vote.

In June of 2008, following decades of work on the Yucca Mountain site, DOE submitted the Yucca Mountain License Application to the NRC for review. Then President Barack Obama named Gregory Jaczko, a former staffer of Senate Majority Leader Harry Reid, to head the NRC. This fulfilled a promise President Obama made to Senator Reid, that he would shut down the

Yucca Mountain project, and the NRC stopped its analysis of the pending application and DOE closed the site.

In 2013, the D.C. Circuit Court of Appeals issued a rare writ of mandamus to the NRC directing work on the Yucca Mountain License Application continue in the “In re: Aiken County” decision. The Court found the NRC violated the law governing the Yucca Mountain licensing process. The NRC’s Atomic Safety and Licensing Board (ASLB) also determined that DOE did not have the authority to withdraw the license and denied the motion to withdraw. Later that year the Court also found that DOE could not continue to collect the nuclear waste fee in the absence of a credible cost estimate for nuclear waste disposal following the termination of the Yucca Mountain program. Following that decision, DOE halted collection of the fee in May of 2014.

Between October 2014 and January 2015 NRC issued their five-volume scientific and technical analysis of DOE’s Yucca Mountain Licensing Application, known as the Safety Evaluation Report (SER). This independent NRC evaluation determined that Yucca Mountain would remain safe for one million years, as required by federal regulations.

Today, with the funding this subcommittee has the ability to provide, the state of Nevada will have an opportunity to challenge the conclusions of that report, and the American people can finally get a yes or no answer on whether Yucca Mountain will become the national repository they were promised. I again urge you to support this critical funding and move the licensing process forward.

Thank you.