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June 11, 2019

Hon. Paul Tonko, Chairman  
Hon. John Shimkus, Ranking Member  
U.S. House Subcommittee on Environment and Climate Change  
2125 Rayburn House Office Building  
Washington, DC. 20515

Subject: June 13 Hearing on "Cleaning Up Communities: Options for the Storage and Disposal of Spent Nuclear Fuel"

Dear Chairman Tonko and Ranking Member Shimkus:

I'm writing to you as the last Senate-confirmed Director of the Office of Civilian Radioactive Waste Management in the Department of Energy to thank you both for holding the subject hearing on the several proposed bills that are attempting to address the issue of stranded spent nuclear fuel and high-level nuclear waste. I held that position from June 2006 until January 2009, during which I led the effort to complete and submit the license application for the Yucca Mountain repository as required by the Nuclear Waste Policy Act (NWPA), as amended. I signed the application to the U.S. Nuclear Regulatory Commission (NRC) for the US DOE in June, 2008.

I strongly support the House review and debate of these important legislative initiatives. I was a witness at the House hearing on H.R. 3053 in April 2017 and have attached a copy of my testimony at that hearing for your information. It contains the rationale as to why a number of the legislation's provisions are needed to be able to move forward with 1) the final adjudication of the Yucca Mountain license application and 2) examine alternatives should the construction license for the repository not be granted.

The possibility of the NRC denying a construction license to DOE for the Yucca site has always been a possibility, but the NWPA is silent on that potential outcome. For that reason, I am in favor of allowing the DOE to pursue options for interim storage. If the House deems it appropriate to authorize an interim storage option, I suggest that it be conditioned on using the "consent-based" siting criteria advocated by Mr. Fettus of the Natural Resources Defense Council (NRDC) and by the State of Nevada as represented by Mr. Halstead.

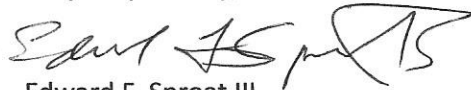
I need to be clear: I do not believe consent-based siting will ever result in spent nuclear fuel being permanently disposed of or moved. It has been tried several times. Witness the failures of the Nuclear Waste Negotiator authorized in the NWPA, the Private Spent Fuel Storage project in Utah, and the support of host Nye County, Nevada for the Yucca Repository. In all of these cases, political opposition developed around those sites, both in the potential host state as well as neighboring states through

which the spent fuel would be transported. It is much easier politically to be opposed to nuclear waste shipments than to be for them. And because of the long time frames needed to evaluate then license and build a repository or interim storage site, political opposition will surely result in changes in political and elected leadership that will withdraw any consent that might be needed. But in addition to consent, the final site must also be geologically sound, which means it must be evaluated in depth before it is deemed suitable. Consent will be needed to evaluate a site and then again to proceed with licensing if it is found suitable. And still, after all of that, anyone can intervene in the licensing process regardless of who has consented. Consent-based siting does sound very appealing. I just don't see it leading to a successful conclusion. Of course, I may be wrong. So why not let the proposed interim storage site(s) try the path proposed by the NRDC and Nevada in their testimony and let's see if it will work.

I would be more than happy to meet or discuss with you or your staffs any questions you may have regarding this letter and my positions in it.

If you both deem fit to allow it, I respectfully request that this letter and its attachment be submitted to the record of the subject hearing.

Very Respectfully,

A handwritten signature in black ink, appearing to read "Edward F. Sproat III". The signature is stylized and cursive, with a large, sweeping flourish at the end.

Edward F. Sproat III  
Former Director  
OCRWM, US DOE

**Statement of Edward F. Sproat III**  
**Former Director (RW-1)**  
**Office of Civilian Radioactive Waste Management**  
**U.S. Department of Energy**  
**Before the**  
**Subcommittee on Environment**  
**Committee on Energy and Commerce**  
**U.S. House of Representatives**  
**April 26, 2017**

Mr. Chairman and Members of the Committee, I am very pleased to have been requested to appear before the Committee and offer my thoughts on the issues that need to be addressed in order to progress the Nation's high-level radioactive waste program. The opinions I will be presenting are based on my more than 40 years of experience working in the nuclear industry both domestically and internationally, and while serving as the Director of the Office of Civilian Radioactive Waste Management (OCRWM) in the Department of Energy from June 2006 to January 2009 in particular. My comments and opinions presented to the Committee are strictly my own and should in no way be construed as representing those of my current employer.

I appeared before this Committee in July 2006, almost eleven years ago, and committed to submit the License Application for the construction of the Yucca Mountain High-Level Radioactive Waste Repository by the end of June 2008. On June 3, 2008, I delivered the application to the offices of the Nuclear Regulatory Commission (NRC). That submittal started the formal licensing process for the repository as required by the Nuclear Waste Policy Act of 1982. In January 2015, the NRC staff issued the last of the five volumes of their Safety Analysis Reports (SERs) which marked the completion of their review of the application. They essentially found that the repository design meets all of the stringent design criteria, both during operation and after closure. Two issues were identified that would need to be addressed before the staff

could recommend to the Commission that a construction license should be granted to the Department of Energy: 1) the Federal land on which the repository is to be sited has not been withdrawn permanently from public use by Congress and 2) the State of Nevada Water Engineer will not grant the Department the water withdrawal permits needed to build and operate the repository. Both of these issues must be addressed.

The next step in the licensing process that must proceed before the NRC can rule on the application is the adjudication of the numerous contentions that have been filed by several intervenors, the primary one of which is the State of Nevada. It is expected that the adversarial hearings which would take place before the Atomic Safety and Licensing Board (ASLB) would take two to three years to conclude before all of the contentions would be ruled upon. An appeals board would then hear any appeals by the parties. The final decision rests with the NRC commissioners. It will be at that point that we will know whether or not the Department will be allowed to build the repository at Yucca Mountain by the regulatory authority charged with making that decision.

So in terms of immediate next steps, the Department and the NRC would need to be funded to begin the hearing process to defend the License Application. The Department would need to re-assemble key members of its licensing team to write testimony and appear as experts witnesses. It would also need outside legal counsel who are experienced in nuclear regulatory law and litigation before the ASLB. A pre-requisite to all of this is that the Department must be an applicant that is willing and able to strongly defend its license application. That has not been the case over the past eight years.

Beyond the licensing process, there are issues which must be addressed by Congress in order to move forward with the Nation's high-level radioactive waste program, regardless of the outcome of the Yucca Mountain licensing process. These issues were identified and addressed in legislation that was proposed in 2006 and again in 2007 by the Bush Administration. That legislation was never acted upon and those issues are still relevant today and must be addressed by Congress. A brief summary of those issues follows.

#### **Availability of the Nuclear Waste Fund**

The ability of the Department to execute the long-term high-level radioactive waste program has been hampered, if not totally stopped, because it does not have access to funding from the Nuclear Waste Fund as was envisaged when the Fund was created by the Nuclear Waste Policy Act. In short, contributions to the Fund from the nuclear industry have been classified as Mandatory Receipts while the distributions from the Fund have been classified as Discretionary, subject to annual appropriations and budget scoring. This has had the effect of creating a varying and diminishing funding stream that makes it virtually impossible for the Department or any organization to execute a long-term capital program with any kind of schedule or cost certainty.

#### **Permanent Land Withdrawal**

As stated earlier in this testimony, the NRC staff found that without permanent withdrawal of the one hundred forty seven thousand (147, 000) acres of the Yucca Mountain site from future public use, the Department cannot demonstrate permanent control of the repository site. Congressional action is needed to withdraw the land.

## **Water Permits**

As also stated earlier, the NRC staff found that the Department was unable to obtain, and the State of Nevada was unwilling to grant the necessary water withdrawal permits to the Department to allow construction and operation of the repository. Nevada has declared that the repository is not in the public interest and, therefore, will not grant the necessary permits. Congress will need to declare that water use at and for the repository is in the public interest. It should also be noted that the Department has historically applied to the State of Nevada for Water Permits as a courtesy to show good faith and a willingness to engage with the State where Yucca Mountain is concerned. The Department does not apply for Water Permits at the Nevada National Security Site and could also by Administrative decision of the Secretary of Energy determine that they do not need to apply for Water Permits for Yucca Mountain. Either way, it is important to resolve this issue to the satisfaction of the Nuclear Regulatory Commission.

## **Transportation**

Regardless of whether we will have a single central repository, a separate defense waste repository, or multiple interim storage sites, in all cases the spent nuclear fuel and high-level waste that currently reside at one hundred twenty one (121) sites in thirty nine (39) states need to be transported from those locations. There are hundreds of local jurisdictions that will be on those transportation routes and it reasonable to expect that some local and state authorities will attempt to block Department use of those transportation routes. Legislation is needed to clarify the Department's authority under the Atomic Energy Act to use federal Department of Transportation preemption if a local authority attempts to block a shipment.

## **Clarification of Federal Authority in Duplicative Regulatory Review Processes**

There are several permitting actions that will be needed for the repository that are not under the jurisdiction of the NRC, but have been delegated to the states by various laws. For example, the Resource Conservation and Recovery Act (RCRA) provides the states regulatory oversight of waste types to be buried at disposal sites. Air emission permits are also administered at the state level. These permitting processes have the potential for additional local intervention and political influence that can stop repository construction and operation, even after the granting of the necessary licenses by the NRC. Legislation is needed to clarify federal authority over these permitting activities for the repository.

In conclusion, in order for the Country to move forward with the permanent disposal of its high-level radioactive waste and spent nuclear fuel, it needs three things: 1) a licensed place to put it, 2) the ability to move it from around the Country to that site, and 3) an organization that is adequately funded and has the requisite authorities so that it can be held accountable for the cost and schedule of executing the program in accordance with the law. Congress has the ability to address all three of these needs and it will need to do so in order for this national dilemma to be permanently solved. Technically, developing a repository is a fairly straightforward project. Politically, it is complex. If Congress can find a way to enable the project to move forward without political interference, the country will finally see success.

I look forward to answering any questions you might have regarding my testimony.