

From: solarsklar@aol.com
Sent: Sunday, January 22, 2017 8:01 PM
To: PrivateISF
Subject: RFI submission on Private Initiatives for Consolidated Interim Storage Facilities by Scott Sklar
Attachments: Nuclear_Comments.Sklar.1_22_17.docx

My comments are attached and below. - Scott Sklar

The U.S. Department of Energy (DOE), Office of Nuclear Energy, released on its website a Request for Information (RFI) on Private Initiatives (PIs) for Consolidated Interim Storage Facilities. The purpose of the RFI is to gather input on the role of PIs for private consolidated interim storage facilities (ISF) services as part of an integrated waste management system

INSTRUCTIONS: To provide your comments on the Request for Information on Private Initiatives, please email privateISF@hq.doe.gov. The comment period ends on January 27, 2017.

Submitted by Scott Sklar, Adjunct Professor, The George Washington University (GWU), January 22, 2017

As one who is called in during emergencies worldwide, to address large, catastrophic, unplanned events, I am urging you to not allow distributed storage of nuclear waste.

Since 2000, in the United States we have 3 -7 earthquakes per year in the USA from magnitude 6.0- 6.9 and 0 – 2.0 per year from 7.0 – 7.9 magnitude.

<http://www.johnstonsarchive.net/other/quake1.html>

In terms of absolute tornado counts, the United States leads the list, with an average of over **1,000** tornadoes recorded each year. Canada is a distant second, with around **100** per year.

<https://www.ncdc.noaa.gov/climate-information/.../us-tornado-climatology>

[In terms of hurricanes per year hitting the USA, from 1-4 per year.](https://www.ncdc.noaa.gov/climate-information/.../us-tornado-climatology)

<http://www.nhc.noaa.gov/pastdec.shtml>

According to DHS Federal Emergency Management Agency (FEMA) Floods are the #1 natural disaster in the United States.
https://www.floodsmart.gov/floodsmart/pages/media_resources/stats.jsp

Ocean surges are huge threats. In 2008, Hurricane Ike made landfall near the north end of Galveston Island as a Category 2 hurricane. Storm surges of 15-20 feet above normal tide levels occurred along the Bolivar Peninsula of Texas and in much of the Galveston Bay area. Property damage from Ike is estimated at \$24.9 billion. Dennis affected much of Florida, and its effects extended well inland over portions of the southeastern United States with the maximum amount rainfall of 12.80 inches occurring near Camden, Alabama. Storm surge flooding of 7-9 ft produced considerable storm surge-related damage near St. Marks, Florida, well to the east of the landfall location. The damage associated with Dennis in the United States is estimated at \$2.23 billion. Isabel was the worst hurricane to affect the Chesapeake Bay region since 1933. Storm surge values of more than 8 feet flooded rivers that flowed into the bay across Virginia, Maryland, Delaware, and Washington, D.C. Isabel was the most intense hurricane of the 2003 season and directly resulted in 17 deaths and more than \$3 billion in damages. <http://www.nhc.noaa.gov/surge/>

From the mid-1980s through 2015 the [average number of acres burned](http://wildfiretoday.com/tag/statistics/) has grown from about 2 million acres a year to around 8 million. <http://wildfiretoday.com/tag/statistics/>

Major fires at industrial and commercial sites as reported by the National Fire Protection association (NFPA). U.S. fire departments responded to an estimated average of 37,000 fires at industrial or manufacturing properties each year, with annual losses from these fires estimated at 18 civilian deaths, 279 civilian injuries, and \$1 billion in direct property damage. Structure fires accounted for 20% of the fires, but 47% of civilian deaths, 82% of civilian injuries, and 69% of direct property damage. Heating equipment (14% of total) and shop tools and industrial equipment (also 14% of total) were the leading causes of structure fires in industrial or manufacturing facilities. A mechanical failure or malfunction was a factor contributing to the ignition of one in four structure fires (24%) in industrial or manufacturing properties, accounting for 23% of civilian injuries and 21% of direct property damage. <http://www.nfpa.org/news-and-research/fire-statistics-and-reports/fire-statistics/fires-by-property-type/industrial-and-manufacturing-facilities/fires-in-us-industrial-and-manufacturing-facilities>.

Why I list statistics from these seven major yearly events that occur beyond our control, is that they have huge impact on considerations of where to store nuclear wastes. As we learned from the Fukushima nuclear disaster, there is nothing that prevents two-or-more of these events to occur at the same time.

I do not believe the NRC or other agencies within the federal government, state or local governments are capable to contain damage from a major event to a nuclear waste storage facility. Therefore, I strongly urge you not to allow this distributed nuclear waste storage option to happen.

The United States is not yet prepared to handle nuclear waste storage on a geographically distributed basis. There is no question these sites will have multiple threats beyond terrorism and human error, and we need to have a much better approach than being suggested in the Federal Register.

Human, food, and watershed protection have to be at the highest priority of this decision, and I do not see anything in the proposal absolutely guarantees these protections that can seriously hurt human life, public health, and national security.

Respectfully submitted, Scott Sklar

The U.S. Department of Energy (DOE), Office of Nuclear Energy, released on its website a Request for Information (RFI) on Private Initiatives (PIs) for Consolidated Interim Storage Facilities. The purpose of the RFI is to gather input on the role of PIs for private consolidated interim storage facilities (ISF) services as part of an integrated waste management system

INSTRUCTIONS: To provide your comments on the Request for Information on Private Initiatives, please email privateISF@hq.doe.gov. The comment period ends on January 27, 2017.

Submitted by Scott Sklar, Adjunct Professor, The George Washington University (GWU), January 22, 2017

As one who is called in during emergencies worldwide, to address large, catastrophic, unplanned events, I am urging you to not allow distributed storage of nuclear waste.

Since 2000, in the United States we have 3 -7 earthquakes per year in the USA from magnitude 6.0- 6.9 and 0 – 2.0 per year from 7.0 – 7.9 magnitude.

<http://www.johnstonsarchive.net/other/quake1.html>

In terms of absolute tornado counts, the United States leads the list, with an average of over **1,000** tornadoes recorded each year. Canada is a distant second, with around **100** per year.

<https://www.ncdc.noaa.gov/climate-information/.../us-tornado-climatology>

[In terms of hurricanes per year hitting the USA, from 1-4 per year.](http://www.nhc.noaa.gov/pastdec.shtml)

<http://www.nhc.noaa.gov/pastdec.shtml>

According to DHS Federal Emergency Management Agency (FEMA) Floods are the #1 natural disaster in the United States. https://www.floodsmart.gov/floodsmart/pages/media_resources/stats.jsp

Ocean surges are huge threats. In 2008, Hurricane Ike made landfall near the north end of Galveston Island as a Category 2 hurricane. Storm surges of 15-20 feet above normal tide levels occurred along the Bolivar Peninsula of Texas and in much of the Galveston Bay area. Property damage from Ike is estimated at \$24.9 billion. Dennis affected much of Florida, and its effects extended well inland over portions of the southeastern United States with the maximum amount rainfall of 12.80 inches occurring near Camden, Alabama. Storm surge flooding of 7-9 ft produced considerable storm surge-related damage near St. Marks, Florida, well to the east of the landfall location. The damage associated with Dennis in the United States is estimated at \$2.23 billion. Isabel was the worst hurricane to affect the Chesapeake Bay region since 1933. Storm surge values of more than 8 feet flooded rivers that flowed into the bay across Virginia, Maryland, Delaware, and Washington, D.C. Isabel was the most intense hurricane of the 2003 season and directly resulted in 17 deaths and more than \$3 billion in damages. <http://www.nhc.noaa.gov/surge/>

From the mid-1980s through 2015 the [average number of acres burned](#) has grown from about 2 million acres a year to around 8 million. <http://wildfiretoday.com/tag/statistics/>

Major fires at industrial and commercial sites as reported by the National Fire Protection association (NFPA). U.S. fire departments responded to an estimated average of 37,000 fires at industrial or manufacturing properties each year, with

annual losses from these fires estimated at 18 civilian deaths, 279 civilian injuries, and \$1 billion in direct property damage. Structure fires accounted for 20% of the fires, but 47% of civilian deaths, 82% of civilian injuries, and 69% of direct property damage. Heating equipment (14% of total) and shop tools and industrial equipment (also 14% of total) were the leading causes of structure fires in industrial or manufacturing facilities. A mechanical failure or malfunction was a factor contributing to the ignition of one in four structure fires (24%) in industrial or manufacturing properties, accounting for 23% of civilian injuries and 21% of direct property damage.
<http://www.nfpa.org/news-and-research/fire-statistics-and-reports/fire-statistics/fires-by-property-type/industrial-and-manufacturing-facilities/fires-in-us-industrial-and-manufacturing-facilities>.

Why I list statistics from these seven major yearly events that occur beyond our control, is that they have huge impact on considerations of where to store nuclear wastes. As we learned from the Fukushima nuclear disaster, there is nothing that prevents two-or-more of these events to occur at the same time.

I do not believe the NRC or other agencies within the federal government, state or local governments are capable to contain damage from a major event to a nuclear waste storage facility. Therefore, I strongly urge you not to allow this distributed nuclear waste storage option to happen.

The United States is not yet prepared to handle nuclear waste storage on a geographically distributed basis. There is no question these sites will have multiple threats beyond terrorism and human error, and we need to have a much better approach than being suggested in the Federal Register.

Human, food, and watershed protection have to be at the highest priority of this decision, and I do not see anything in the proposal absolutely guarantees these protections that can seriously hurt human life, public health, and national security. Respectfully submitted, Scott Sklar