

Blount, Barbara

Subject: FW: Comments to NRC Docket ID NRC-2017-0211, NUREG-2215
Attachments: Donna's Comments to NRC re dry storage.pdf; 1-2-18 MB's NRC development of.pdf

Comments to NRC Docket ID NRC-2017-0211, NUREG-2215

NRC development of "New Regulations for Spent Fuel Dry Storage Systems and Facilities"

could not be coming at a better time.

As many of the nuclear reactor sites across the U.S. designed in the 1960's are being decommissioned, the NRC responsibility to protect the public will fail if the spent fuel is handled with the primary goal of economic gain rather than safety. Please insure that safety is foremost in the new regulations governing the storage of lethal, long-lived radioactive waste.

Unfortunately, the thin canisters currently approved have been proven by NRC's own studies to be vulnerable to through wall cracks within a very short time. We need thick walled casks that can be monitored, repaired and transported, if absolutely necessary.

Casks should be able to be monitored for potential leaks BEFORE they happen. NRC's own documents also include the admission from canister manufacturer Holtec, that if un-borated water makes its way through the through-wall cracks, there would be a criticality.

Once the spent fuel is placed into these experimental thin-walled canisters there exists no way to thoroughly check for cracks or fissures beginning to be cracks.

As many have noted, this is simple logic - and none of you NRC folks would buy a car without the ability to check it for failures and to be able to repair those failures of components. Especially if the data showed that there exists possibilities for failure in a very short time - in the case of thin canisters, within 2 to 17 years.

135
11/15/2017

82 FR 52944

SUNSI Review Complete

Template = ADM - 013

E-RIDS= ADM-03

Add= Jeremy Smith (Juss)

Better technology already exists. Storage should be in thick casks that can be monitored. There must be technology able to deal with problems onsite, such as a hot cell. Casks should not be moved offsite unless absolutely necessary. The risk of transportation is too extreme to be allowed.

In some cases where onsite storage is totally inappropriate, such as in the case of San Onofre where the ISFSI is mere feet away from the rising ocean and mere inches above the rising water table in a tsunami zone and surrounded by earthquake faults known to be close to fracturing, the waste should be minimally moved to a more appropriate place.

The thick casks should be in a hardened building with around the clock adequate guard and with the potential to re-enclose the casks if necessary because of leakage.

NRC should require a hot cell at each site. While that is expensive, it is the price industry and the military must pay for the use of such risky technology.

This waste must be properly stored and guarded with a plan for it to be re-enclosed when the inevitable leaks occur, since it lasts for thousands and millions of years, otherwise, our planet's DNA will be destroyed.

Please add my agreement to the comments posted by Donna Gilmore, of SanOnofreSafety.org. (See pdf below.)

Sincerely,

Mary Beth Brangan

Date: January 2, 2018

Comments to NRC Docket ID NRC-2017-0211, NUREG-2215

NRC Standard Review Plan for Spent Fuel Dry Storage Systems and Facilities Draft, November 2017

<https://www.nrc.gov/docs/ML1731/ML17310A693.pdf>

The NRC cannot meet its mission to “ensure adequate protection of public health and safety and the environment” if it continues to allow thin-wall welded canisters they admit are vulnerable to cracks, that cannot be fully inspected (inside or out), and cannot be repaired, maintained and monitored to prevent (not just detect) radiological leaks. There is no adequate or proven detailed plan required to address major radiological leaks, or to address on-site replacement of containers. Seismic requirements for partial cracks is not addressed. See below webpage for details on the Holtec UMAX System planned for San Onofre and why this is an example of a system with major problems that should not be approved.
<https://sanonofresafety.org/holtec-hi-storm-umax-nuclear-waste-dry-storage-system/>

Each canister contains about as much or more lethal Cesium-137 as released from the 1986 Chernobyl nuclear disaster, yet the NRC knows the boron metal in the canisters will not prevent the fuel from going critical if exposed to non-borated water from through wall cracks (in storage or transport).

NUREG-2215 states it requires “conservative assumptions”, “inspections”, and admits to many “unknowns”. NUREG-2215 is not “conservative”, does not require adequate “inspections”, and does not resolve the many “unknowns” that would be eliminated if the NRC mandated and enforced critical safety requirements to inspect, monitor, maintain and repair (both inside and out) to PREVENT leaks.

Proven dry storage technology exists that meets critical basic safety requirements we expect in a car. Does the NRC consider thin-wall canisters “conservative assumptions” compared to thick-wall casks? If so, why? Why does the NRC allow containers that do not meet these basic critical safety requirements?

Respectfully,

Donna Gilmore, SanOnofreSafety.org
donnagilmore@gmail.com 949-204-7794

Basic Safety Requirements	Thin-wall canisters	Thick-wall casks
Thick walls	No. Only 1/2 to 5/8 th of an inch	Yes. 10 to 19.75 inches
Won't crack.	No	Yes
Ability to inspect inside & out, maintain, repair (fuel baskets, other parts)	No	Yes
Monitor to fix problems <i>before</i> leaks	No	Yes
ASME <i>container</i> certification	No	Yes
Defense in depth (redundancy)	No	Yes
Stored in concrete building	No	Yes
Gamma & neutron protection	Requires vented concrete overpack	Yes
Transportable	No transport with cracks. 10 CFR § 71.85	Yes
Proven technology	No. Conditions unknown. Most in use less than 15 yrs, a few 30 yrs.	Yes. Inspected and used over 40 years

Comments to NRC Docket ID NRC-2017-0211, NUREG-2215

NRC development of "New Regulations for Spent Fuel Dry Storage Systems and Facilities" could not be coming at a better time.

As many of the nuclear reactor sites across the U.S. designed in the 1960's are being decommissioned, the NRC responsibility to protect the public will fail if the spent fuel is handled with the primary goal of economic gain rather than safety. Please insure that safety is foremost in the new regulations governing the storage of lethal, long-lived radioactive waste.

Unfortunately, the thin canisters currently approved have been proven by NRC's own studies to be vulnerable to through wall cracks within a very short time. We need thick walled casks that can be monitored, repaired and transported, if absolutely necessary.

Casks should be able to be monitored for potential leaks BEFORE they happen. NRC's own documents also include the admission from canister manufacturer Holtec, that if un-borated water makes its way through the through-wall cracks, there would be a criticality.

Once the spent fuel is placed into these experimental thin-walled canisters there exists no way to thoroughly check for cracks or fissures beginning to be cracks.

As many have noted, this is simple logic - and none of you NRC folks would buy a car without the ability to check it for failures and to be able to repair those failures of components. Especially if the data showed that there exists possibilities for failure in a very short time - in the case of thin canisters, within 2 to 17 years.

Better technology already exists. Storage should be in thick casks that can be monitored. There must be technology able to deal with problems onsite, such as a hot cell. Casks should not be moved offsite unless absolutely necessary. The risk of transportation is too extreme to be allowed.

In some cases where onsite storage is totally inappropriate, such as in the case of San Onofre where the ISFSI is mere feet away from the rising ocean and mere inches above the rising water table in a tsunami zone and surrounded by earthquake faults known to be close to fracturing, the waste should be minimally moved to a more appropriate place.

The thick casks should be in a hardened building with around the clock adequate guard and with the potential to re-enclose the casks if necessary because of leakage.

NRC should require a hot cell at each site. While that is expensive, it is the price industry and the military must pay for the use of such risky technology.

This waste must be properly stored and guarded with a plan for it to be re-enclosed when the inevitable leaks occur, since it lasts for thousands and millions of years, otherwise, our planet's DNA will be destroyed.

Please add my agreement to the comments posted by Donna Gilmore, of SanOnofreSafety.org. (See pdf below.)

Mary Beth Brangan

Date: January 2, 2018

Comments to NRC Docket ID NRC-2017-0211, NUREG-2215

NRC Standard Review Plan for Spent Fuel Dry Storage Systems and Facilities Draft, November 2017

<https://www.nrc.gov/docs/ML1731/ML17310A693.pdf>

The NRC cannot meet its mission to “ensure adequate protection of public health and safety and the environment” if it continues to allow thin-wall welded canisters they admit are vulnerable to cracks, that cannot be fully inspected (inside or out), and cannot be repaired, maintained and monitored to prevent (not just detect) radiological leaks. There is no adequate or proven detailed plan required to address major radiological leaks, or to address on-site replacement of containers. Seismic requirements for partial cracks is not addressed. See below webpage for details on the Holtec UMAX System planned for San Onofre and why this is an example of a system with major problems that should not be approved.
<https://sanonofresafety.org/holtec-hi-storm-umax-nuclear-waste-dry-storage-system/>

Each canister contains about as much or more lethal Cesium-137 as released from the 1986 Chernobyl nuclear disaster, yet the NRC knows the boron metal in the canisters will not prevent the fuel from going critical if exposed to non-borated water from through wall cracks (in storage or transport).

NUREG-2215 states it requires “conservative assumptions”, “inspections”, and admits to many “unknowns”. NUREG-2215 is not “conservative”, does not require adequate “inspections”, and does not resolve the many “unknowns” that would be eliminated if the NRC mandated and enforced critical safety requirements to inspect, monitor, maintain and repair (both inside and out) to PREVENT leaks.

Proven dry storage technology exists that meets critical basic safety requirements we expect in a car. Does the NRC consider thin-wall canisters “conservative assumptions” compared to thick-wall casks? If so, why? Why does the NRC allow containers that do not meet these basic critical safety requirements?

Respectfully,

Donna Gilmore, SanOnofreSafety.org
donnagilmore@gmail.com 949-204-7794

Basic Safety Requirements	Thin-wall canisters	Thick-wall casks
Thick walls	No. Only 1/2 to 5/8 th of an inch	Yes. 10 to 19.75 inches
Won't crack.	No	Yes
Ability to inspect inside & out, maintain, repair (fuel baskets, other parts)	No	Yes
Monitor to fix problems <i>before</i> leaks	No	Yes
ASME <i>container</i> certification	No	Yes
Defense in depth (redundancy)	No	Yes