SUNSI Review Complete
Template = ADM – 013
E-RIDS= ADM-03
Add= E. Wong (ELW3)

As of: 11/20/15 4:03 PM
Received: November 20, 2015
Status: Pending_Post
Tracking No. 1jz-8md7-uipk
Comments Due: November 20, 2015
Submission Type: Web

PUBLIC SUBMISSION

Docket: NRC-2015-0241
Fuel Retrievability

Comment On: NRC-2015-0241-0001
Fuel Retrievability; Request for Comment on Draft Interim Staff Guidance

Document: NRC-2015-0241-DRAFT-0005
Comment on FR Doc # 2015-26743

10/27/2015
80 FR 63843
(3)

Submitter Information

Name: Richard Morgal
Address:
13915 Mussey Grade Road
Ramona, CA, 92065
Email: rmorgal@wildblue.net

General Comment

The DOE has stated that large canisters (such as the 37 assembly Holtec Hi-Storm UMAX) are not suitable for disposal at a DOE permanent repository.

If the NRC allows these large canisters to be loaded and then stored on-site with no plan for retrievability of the assemblies, it would appear that the NRC is essentially stranding these canisters on-site permanently. Because the DOE will not take them due to their excessive size.

This is a very realistic, non-safety related, problem with current NRC regulations to allow spent nuclear fuel to be stored in dry storage technology with no documented/proven means of re-configuring the spent nuclear fuel into canisters the DOE sees as compatible with a permanent repository.

Given this conflict between the NRC allowing huge canisters to store spent nuclear fuel and its incompatibility with DOE permanent storage of the spent fuel, it is likely the canisters will be stranded on-site for many decades.

For cooling purposes these huge stainless steel canisters will be exposed to ambient air. At marine influenced sites, the ambient air is rich with Magnesium salts known to cause Chloride Induced Stress Corrosion Cracking (CISCC) to the canisters.

During the decades of storage, it is quite likely that CISCC will degrade the canisters to a point where they are not capable of containing spent nuclear fuel during transport and will require being re-packaged before being relocated.

During the decades of storage, it is quite likely that CISCC will degrade these canisters to a point where they will lose their ability to remain air-tight, allowing radioactive Krypton 85 to be released into the immediate environment.

During the decades of storage, these breached canisters will "breathe" in the ambient air, allowing both oxygen and water to reach the spent fuel rods, creating opportunities for the zirconium cladding to oxidize...

During the decades of storage, the people who benefited from the use of the electric power generated by the spent nuclear fuel will have passed on, leaving a new generation to address the mess that the NRC and the DOE has left behind. With no benefit derived from the waste we are leaving them.

Have our ancestors left us a legacy as toxic or dangerous as the legacy we are leaving our descendants inside of these dry canisters? I can't think of any.

With no documented means of retrieving the material safely available now, how can the NRC force later generations to solve this problem?

Ethically, the NRC must specify and PROVE a safe means of retrieving the spent nuclear fuel assemblies on-site from these huge stainless steel canisters BEFORE these canisters are allowed to be stored on-site for countless decades.

Since these canisters are already deployed on-site of most nuclear power plant sites, this document should NOT reach the conclusion that there is no need for the spent nuclear fuel to be retrievable.

The spent nuclear fuel must be retrievable as one of the basic tenants of the storage technology being implemented so that it can be repackaged into DOE certified canisters suitable for permanent disposal.

The spent nuclear fuel must be retrievable to allow the material to be repackaged before being relocated to a different location after years of being deployed in a CISCC prone environment.

The spent nuclear fuel must be retrievable to allow the material to be repackaged after the canister has suffered from CISCC sufficiently to breach the canister allowing the egress of oxygen and water into the canister. Leaving behind an even larger threat to future generations.

The spent nuclear fuel must be retrievable, with specifications in place that document proven methods and procedures relating to how one goes about safely getting the fuel out of the canisters the NRC is allowing to be deposited across our country.

Our nation prides itself as a nuclear nation, our policies and procedures for the handling of our spent nuclear fuel need to be exemplary to the rest of the world. What is being proposed in this document is a disgrace.

Its our mess, lets keep it clean and tidy rather than leaky and volatile. Future generations are relying upon the NRC to do the right thing and plan for all foreseeable situations that could arise in the future.

The problems I point out in the NRC's approach to retrievability of our spent nuclear fuel are not far fetched

and are foreseeable situations that are likely to occur. Please includ in the Fuel Retrievability document solutions to the three scenarios listed above.

Those being:
Incompatibility with DOE permanent repository canister requirements.
Need to repackage the spent fuel before transport following decades of storage in salt rich environments.
Need to repackage the spent fuel following a breached canister that has been stored for decades.