EDO Principal Correspondence Control

FROM: DUE: 05/17/10 EDO CONTROL: G20100244
DOC DT: 04/09/10
FINAL REPLY:

Russell Jim
Confederated Tribes and Bands
of the Yakama Nation

TO:

Chairman Jaczko

FOR SIGNATURE OF : ** GRN ** CRC NO: 10-0176

Leeds, NRR

DESC:

Storage of Spent Power Reactor Fuel at Columbia Generating Station (CGS) (EDATS: SECY-2010-0219)

ROUTING:

Borchardt
Virgilio
Mallett
Ash
Mamish
Burns/Rothschild
Weber, NMSS
Collins, RIV
Miller, FSME
Frazier, OEDO

DATE: 04/26/10

ASSIGNED TO: CONTACT:

NRR Leeds

SPECIAL INSTRUCTIONS OR REMARKS:

EDATS

Electronic Document and Action Tracking System

EDATS Number: SECY-2010-0219

Source: SECY

General Information

Assigned To: NRR

Other Assignees:

Subject: Storage of Spent Power Reactor Fuel at Columbia Generating Station (CGS)

Description:

CC Routing: RegionIV; FSME

ADAMS Accession Numbers - Incoming: ML101160435

OEDO Due Date: 5/17/2010 11:00 PM

SECY Due Date: 5/17/2010 11:00 PM

Response/Package: NONE

Other Information

Cross Reference Number: G20100244, LTR-10-0176

Related Task:

File Routing: EDATS

Staff Initiated: NO

Recurring Item: NO

Agency Lesson Learned: NO

OEDO Monthly Report Item: NO

Process Information

Action Type: Letter

Signature Level: NRR

Approval Level: No Approval Required

OEDO Concurrence: NO

OCM Concurrence: NO

OCA Concurrence: NO

Special Instructions:

Priority: Medium

Sensitivity: None

Urgency: NO

Document Information

Originator Name: Russell Jim

Originating Organization: Confederated Tribes and Bands of the Yakama Nation

Addressee: Chairman Jaczko

Incoming Task Received: Letter

Date of Incoming: 4/9/2010

Document Received by SECY Date: 4/23/2010

Date Response Requested by Originator: NONE

OFFICE OF THE SECRETARY
CORRESPONDENCE CONTROL TICKET

Date Printed: Apr 23, 2010 12:13

PAPER NUMBER:	LTR-10-0176	**LOGGING DATE:**	04/20/2010
ACTION OFFICE:	EDO		
AUTHOR:	Jim Russell		
AFFILIATION:	YAKIMA		
ADDRESSEE:	Gregory Jaczko		
SUBJECT:	Urges the NRC to strengthen efforts to ensure the safe and secure storage of spent power reactor fuel at the Columbia Generating Station (CGS) located on the U.S. DOE's Hanford site		
ACTION:	Direct Reply		
DISTRIBUTION:	RF, SECY to Ack		
LETTER DATE:	04/09/2010		
ACKNOWLEDGED	No		
SPECIAL HANDLING:			
NOTES:			
FILE LOCATION:	ADAMS		
DATE DUE:	05/17/2010	**DATE SIGNED:**	

EDO --G20100244

Confederated Tribes and Bands of the Yakama Nation

Established by the Treaty of June 9, 1855

April 9, 2010

The Honorable Gregory B. Jaczko
Chairman
U.S. Nuclear Regulatory Commission
Mail Stop 0-16G4
Washington D.C. 20555-0001

Dear Chairman Jaczko:

I am writing to urge the Nuclear Regulatory Commission to strengthen efforts to ensure the safe and secure storage of spent power reactor fuel at the Columbia Generating Station (CGS) located on the U.S. Department of Energy's Hanford site. In light of the decision by President Obama to cancel the Yucca Mountain nuclear waste repository, the timely disposal of spent power reactor fuel can no longer be assumed. Instead there is a growing likelihood that spent power reactor fuel will accumulate and remain at reactor sites for an indefinite period.

In particular, we urge the NRC to end its policy of allowing dense compaction of spent fuel in pools and require highly radioactive fuel assemblies greater than five years old be placed into dry, hardened storage modes capable of withstanding aerial impacts, earthquakes and acts of malice.

The Hanford site is located on land to which the Yakama Nation has perpetual rights under the Treaty of June 9, 1855. The Federal government maintains a special trust relationship with Indian tribes pursuant to treaties, statutes, Executive Orders, judicial decisions and other legal instruments. Inherent in this relationship is an enforceable fiduciary responsibility to the Yakama Nation to protect its lands and resources. Moreover, the Yakama Reservation is within the 50-mile Ingestion Pathway Zone if a major radiological release were to occur at the Columbia Generating Station.

As you may know, the CGS is a Boiling Water Reactor Mark II that began operation in 1984. It is in the early process of extending its operating license, which expires in December 2023. This reactor has generated approximately 500 metric tons of spent fuel. Over the next several decades the radioactive inventory in spent fuel at the Columbia Generating Station is estimated to more than quadruple. The major preponderance of spent fuel at the CGS is densely compacted in an above ground pool, well above grade. On average, spent fuel ponds hold five to 10 times more long-lived radioactivity than a reactor core. Particularly worrisome is the large amount of cesium 137 in fuel ponds, which contain anywhere from 20 to 50 million curies of this dangerous isotope.

For the past several years, the NRC has sponsored research which indicated that consequences from drainage of spent fuel pools from accidents and earthquakes could be considerable. For instance, a 1997 report for the NRC by Brookhaven National Laboratory found that a severe pool fire could render about 188 square miles uninhabitable, cause as many as 28,000 cancer

fatalities, and cost $59 billion in damage. But, the frequency of these events was considered to be quite small.

In 2002, Attorneys General from states hosting most of the nation's nuclear power plants called upon the U.S. Congress to pass legislation to "enhance protections for one of the most vulnerable components of a nuclear power plant –its spent fuel pools."

In 2003 an independent study reported that drainage of a spent fuel pool by a terrorist attack could result in as much as 27,000 square miles of severe land contamination. This was the first study to consider potential risks of terrorist attacks on spent fuel pools.

In response, the U.S. Congress requested the National Academy of Sciences to convene a special panel to address this concern. In 2005 the Academy panel warned that,"...under some conditions, a terrorist attack that partially or completely drained a spent fuel pool could lead to a propagating zirconium cladding fire and the release of large quantities of radioactive materials to the environment." The panel also noted that, "pools are potentially susceptible to attacks from above or from the sides depending on their elevation with respect to grade and the presence of surrounding shielding structures." Because of the sensitivity of the subject, the panel submitted classified findings and recommendations to the NRC.

The Academy panel also visited German nuclear sites, where spent fuel pools are under heavy containment or stored in dry casks, which are placed in earthen berms or thick-wall structures. The German nuclear industry took these steps 25 years ago in response to fighter jet crashes and concerns over acts of terror.

We note that the NRC is working on a new "waste confidence" policy. We urge that this new policy not be contingent on the timely opening of a high-level waste repository, but rather on the safety and security of spent fuel storage, which may unfortunately, extend into the indefinite future. Specifically, we urge that license extensions being sought, including that for the Columbia Generating Station be contingent on emplacement of spent fuel greater than five years of age, in dry, hardened storage. Future reactors should be required to have spent fuel pools under heavy containment.

I look forward to your response.

Sincerely,

Russell Jim. Manager
Environmental Restoration and
Waste Management Program

cc. Energy Northwest Board of Directors
Yakama Nation Radioactive and Hazardous Waste Committee
Philip Rigdon, Deputy Director, Yakama Nation Department of Natural Resources