

November 8, 2005

NOTE TO: FILE

DOCKET NO: 72-08

SUBJECT: 9/14/05, CONFERENCE CALL WITH CALVERT CLIFFS NUCLEAR POWER PLANT INC.(CCNPP), AND TRANSNUCLEAR INC. (TN), TO DISCUSS USE OF COMPRESSED AIR TO BLOW DOWN CASKS

ATTENDEES:

<u>NRC</u>	<u>CCNPP</u>	<u>TN</u>
Wayne Hodges	Getachew Tesfaye	Tara Neider
Geoffery Hornseth	Robert Bell	Jayant Bondre
Christopher Brown		Jeff Gagne
Larry Campbell		
Joe Sebrosky		
Ray Wharton		
Jose Cuadrado		

DISCUSSION:

The purpose of the conference call was to discuss the operating procedures for CCNPP's independent spent fuel storage installation (ISFSI). Specifically, the staff questioned if CCNPP intended to use air to blow down casks in the next loading campaign. CCNPP explained that the use of air was allowed by its procedures. The staff explained that it was preparing guidance relative to the use of air to blow down casks and provided CCNPP with the following information:

- C NRC has approved use of air for blow down of casks but now realizes that may not be the best approach.
- C Oxidation of fuel pellets (UO<sub>2</sub> to U<sub>3</sub>O<sub>8</sub>) causes swelling of the pellets and may rupture the cladding. Result is damaged fuel not in cans and unauthorized material (U<sub>3</sub>O<sub>8</sub>).
- C Although the NRC has accepted hair line cracks and pin holes as intact fuel, these flaws permit oxidation in presence of air and can lead to rupture of the cladding.
- C Transportation casks (including dual purpose casks) generally are not approved for U<sub>3</sub>O<sub>8</sub> fuel.
- C Simplest approach is to use a non-reacting atmosphere.
- C Next best approach is to show that cask was not drained into the fuel region using air.

- C If fuel region is exposed, then two possible ways to show no problem:
  - Use plant records to show pristine fuel (including no hair line cracks or pin hole leaks)
  - Show time and temperature of exposure insufficient to produce significant oxidation
- C Remaining options include:
  - Get transportation cask approved for damaged fuel
  - Inspect fuel and place damaged fuel in cans.

CCNPP indicated that it believed that it could demonstrate that the fuel it intended to load had no hair line cracks or pin hole leaks through plant records. For example, CCNPP could demonstrate:

- C there was no fuel leakage during the operating cycle for the fuel that is to be loaded in the casks
- C the fuel to be loaded in the casks is tested (vacuum sipped) prior to it being loaded in the casks

The staff stated that if CCNPP could demonstrate that the fuel was in pristine condition, then the use of air to blow down the casks should not be a problem.

- C If fuel region is exposed, then two possible ways to show no problem:
  - Use plant records to show pristine fuel (including no hair line cracks or pin hole leaks)
  - Show time and temperature of exposure insufficient to produce significant oxidation
- C Remaining options include:
  - Get transportation cask approved for damaged fuel
  - Inspect fuel and place damaged fuel in cans.

CCNPP indicated that it believed that it could demonstrate that the fuel it intended to load had no hair line cracks or pin hole leaks through plant records. For example, CCNPP could demonstrate:

- C there was no fuel leakage during the operating cycle for the fuel that is to be loaded in the casks
- C the fuel to be loaded in the casks is tested (vacuum sipped) prior to it being loaded in the casks

The staff stated that if CCNPP could demonstrate that the fuel was in pristine condition, then the use of air to blow down the casks should not be a problem.

<b>OFC</b>	SFPO	C	SFPO	C	SFPO		SFPO	
<b>NAME</b>	JSebrosky	EZiegler		MWHodges		RNelson		
<b>DATE</b>	11/07/05	11/08/05		11/08/05		11/08/05		

C = COVER

E = COVER & ENCLOSURE

N = NO COPY

**OFFICIAL RECORD COPY**