

From: Dudes, Laura
Sent: Wednesday, February 13, 2013 4:30 PM
To: 'tomclements329@cs.com'
Subject: Questions regarding the AP1000 reactor pressure vessel storage

Dear Mr. Clements,

On January 16th you expressed concern about the Vogtle 3 reactor pressure vessel being stranded in the port of Savannah. In particular you asked what actions the NRC would take related to the pressure vessel being unmonitored and unprotected, and what actions were being taken about the faulty rail car.

The reactor vessel was unloaded in the Port of Savannah on December 15, 2012. In order to ship it to the site, the vessel was loaded onto shipping components consisting of a "Schnabel car" and shipping frame. The shipping components are designed to work together to raise (as much as 4') and lower (to the ground) the reactor vessel and to allow movements around the railroad track bends while maintaining the reactor vessel's center of gravity over the track. In December, the contractor started to ship the vessel to the site. Shortly after the evolution started, the movement of the shipping frame was determined to be out of tolerance, and the train was stopped.

The vessel was returned to the Port of Savannah. Visual observations of the vessel were made, and no issues were detected. The shrink wrap around the vessel had not been scratched or damaged.

The vessel is currently under the protection of the Department of Homeland Security (DHS) in the Port of Savannah. It is being stored in accordance with the requirements identified in the Vogtle 3 & 4 combined license. Those storage requirements can be found in the American Society of Mechanical Engineers Nuclear Quality Assurance-1 (NQA-1) standard 1994 edition. NQA-1 identifies Quality Assurance Requirements for Nuclear Facility Applications. In accordance with NQA-1 Subpart 2.2, section 2.2.4, the reactor vessel is required to be stored with protection against the weather, acceleration forces, airborne contamination and physical damage.

The actual packaging requirements must meet the following criteria:

- (a) Items, just before packaging, shall have been inspected for cleanness according to the requirements specified in the purchasing document. Dirt, oil residue, metal chips, or other forms of contamination shall have been removed by approved cleaning methods. Any entrapped water shall have been removed.
- (b) All openings into items shall be capped, plugged, and sealed (see para. 3.5). Weld end preparations shall be protected from corrosion and physical damage.
- (c) Items subject to detrimental contamination or corrosion, either internal or external, shall be suitably protected.
- (d) Items packed in containers shall be blocked, braced, or cushioned to prevent damage (see para. 3.8).
- (e) The identity of the item shall be maintained by marking (see para. 3.9) or other appropriate means.

The storage requirements include the following: items may be stored outdoors in an area marked and designated for storage that is well drained, preferably gravel covered or paved, and

reasonably removed from the actual construction area and traffic so that the possibility of damage from construction equipment is minimized. Items shall be stored on cribbing or equivalent to allow for air circulation and to avoid trapping water.

Westinghouse has performed an Apparent Cause Analysis of the event and is evaluating various repair options to the shipping frame. Once the shipping frame has been repaired the reactor vessel will be shipped to the site. Following delivery to the site, the vessel will undergo receipt inspections by the Southern Nuclear. The NRC plans to conduct an inspection in conjunction with the licensee's receipt activity, and will verify that no damage to the vessel has occurred.

Please feel free to contact me if you have further questions.

Sincerely,

Laura A. Dudes

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