

## NorthAnnaRAIsPEm Resource

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**From:** Buckberg, Perry  
**Sent:** Tuesday, December 09, 2014 10:47 AM  
**To:** 'na3raidommailbox@dom.com' (na3raidommailbox@dom.com)  
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**Cc:** NorthAnnaRAIsPEm Resource; Weisman, Robert; Carpentier, Marcia; Hinson, Charles; Williams, Stephen; McCoppin, Michael  
**Subject:** North Anna 3 COLA RAI 149-7701 (11.04 - Solid Waste Management System)  
**Attachments:** NA3 COLA RAI 149 RPAC 7701.pdf

By letter dated November 26, 2007, Dominion Virginia Power (Dominion) submitted a Combined License Application for North Anna, Unit 3, pursuant to Title 10 of the *Code of Regulations*, Part 52. The U.S. Nuclear Regulatory Commission (NRC) staff is performing a detailed review of this COLA.

The NRC staff has identified that additional information is needed to continue portions of the review and a Request for Additional Information (RAI), is enclosed. To support the review schedule, Dominion is requested to respond within 30 days of the date of this request. If the RAI response involves changes to the application documentation, Dominion is requested to include the associated revised documentation with the response.

Thanks,

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U.S. Nuclear Regulatory Commission

Office of New Reactors

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**From:** Buckberg, Perry

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## **Request for Additional Information 149**

Issue Date: 12/8/2014

Application Title: North Anna, Unit 3 - Docket Number 52-017

Operating Company: Dominion

Docket No. 52-017

Review Section: 11.04 - Solid Waste Management System

Application Section: 11.04

### **QUESTION 11.04-12**

The guidance contained in Regulatory Guide 1.206 "Combined License Applications for Nuclear Power Plants" C.I.12.3.1 "Facility Design Features," notes that the applicant is to describe the design features provided to maintain occupational radiation exposure (ORE) as low as is reasonably achievable (ALARA). The guidance contained in Standard Review Plan (SRP) Appendix 11.4-A "Design Guidance for Temporary Storage of Low-Level Radioactive Waste" states that storage plans should address container protection and that good engineering judgment should be used to ensure that radioactive materials are contained safely. The guidance of SRP Appendix 11.4-A also states that when significant handling and personnel exposure can be anticipated, licensees should incorporate ALARA methodology in accordance with Regulatory Guide 8.8 "Information Relevant to Ensuring That Occupational Radiation Exposures at Nuclear Power Stations Will Be as Low as is Reasonably Achievable".

North Anna Power Station Unit 3 (NAPS) Combined License (COL) FSAR 11.4.2.2. Container Storage Subsystems, states, "Shield bells also provide structural integrity to permit stacking of HICs. The HICs must be stacked two levels high to accommodate the storage needs." CNS-8-120B is the designation for a shielded transportation cask that is not designed to be stacked. High Integrity Containers (HIC) such as the model PL8-120 High Density Polyethylene (HDPE) or L8-120 carbon steel containers are also not designed to be directly stacked. However, NAPS COL FSAR 11.4.2.2.4 states that "The HICs are provided with shield "bells." A shield bell is a steel, vertical right circular cylinder with an open bottom. It is capable of venting to the general area. Shield bells are placed over HICs to provide radiation shielding."

1. Please revise and update the NAPS COL FSAR Section 11.4.2.2.4 to appropriately describe the waste storage container (i.e. container type and volume), the design features provided to protect the structural integrity of stored waste and the design provisions for maintaining ORE ALARA while stacking waste containers, or provide the specific alternative approaches used and the associated justification.
2. FSAR 11.4.2.2.4 does not describe the design features that will allow double stacking these waste containers. Please revise and provide the design to be used (stacking rings, see reference RAI question 12.03-12.04-26) to allow stacking HICs.