

## CCNPP3eRAIPEm Resource

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**From:** Arora, Surinder  
**Sent:** Monday, July 16, 2012 4:05 PM  
**To:** 'Infanger, Paul'; 'UNECC3Project@unistarnuclear.com'  
**Cc:** CCNPP3eRAIPEm Resource; Segala, John; Curran, Gordon; McKenna, Eileen; Wilson, Anthony; Vrahoretis, Susan; Miernicki, Michael; McLellan, Judith  
**Subject:** CCNPP3 - Final RAI 359 BPTS 6564  
**Attachments:** FINAL RAI 359 BPTS 6564.doc

Paul,

Attached is Final RAI No. 359 (eRAI No. 6564) pertaining to section 3.5.1 of the Calvert Cliffs Unit 3 FSAR. The draft of this RAI was sent to you on June 25, 2012 asking you to request a clarification call, if required, by July 11, 2012. Since you have not requested a clarification phone call as of today, it is assumed that UniStar does not require clarification call on this RAI. This email, therefore, transmits the RAI as "final" for providing your response.

The schedule we have established for review of your application assumes technically correct and complete responses within 30 days of receipt of RAIs. For any RAIs that cannot be answered within 30 days, it is expected that a schedule date for submitting your technically correct and complete response will be provided to the staff within the 30 day period so that the staff can assess how this information will impact the review schedule.

Your response letter should also include a statement confirming that the response does or does not contain any sensitive or proprietary information.

Thanks

**SURINDER ARORA, PE**  
**PROJECT MANAGER,**  
**Office of New Reactors**  
**US Nuclear Regulatory Commission**

Phone: 301 415-1421  
FAX: 301 415-6406  
Email: [Surinder.Arora@nrc.gov](mailto:Surinder.Arora@nrc.gov)

**Hearing Identifier:** CalvertCliffs\_Unit3Col\_RAI  
**Email Number:** 234

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**Subject:** CCNPP3 - Final RAI 359 BPTS 6564  
**Sent Date:** 7/16/2012 4:04:32 PM  
**Received Date:** 7/16/2012 4:04:33 PM  
**From:** Arora, Surinder

**Created By:** Surinder.Arora@nrc.gov

**Recipients:**

"CCNPP3eRAIEm Resource" <CCNPP3eRAIEm.Resource@nrc.gov>  
Tracking Status: None  
"Segala, John" <John.Segala@nrc.gov>  
Tracking Status: None  
"Curran, Gordon" <Gordon.Curran@nrc.gov>  
Tracking Status: None  
"McKenna, Eileen" <Eileen.McKenna@nrc.gov>  
Tracking Status: None  
"Wilson, Anthony" <Anthony.Wilson@nrc.gov>  
Tracking Status: None  
"Vrahoretis, Susan" <Susan.Vrahoretis@nrc.gov>  
Tracking Status: None  
"Miernicki, Michael" <Michael.Miernicki@nrc.gov>  
Tracking Status: None  
"McLellan, Judith" <Judith.McLellan@nrc.gov>  
Tracking Status: None  
"Infanger, Paul" <paul.infanger@unistarnuclear.com>  
Tracking Status: None  
"UNECC3Project@unistarnuclear.com" <UNECC3Project@unistarnuclear.com>  
Tracking Status: None

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**Recipients Received:**

Request for Additional Information No. 359 (eRAI 6564)

7/16/2012

Calvert Cliffs Unit 3

UniStar

Docket No. 52-016

SRP Section: 03.05.01.01 - Internally Generated Missiles (Outside Containment)

Application Section: SRP 3.5.1.1

QUESTIONS for Balance of Plant and Technical Specifications Branch (BPTS)

03.05.01.01-1

GDC 4, in part, requires SSCs to be protected from internally generated missiles. COL Item 3.5-8 was included in the EPR FSAR to address control of unsecured pressurized gas cylinders from becoming missiles. To address this COL Item, the applicant proposed a revision to COL/FSAR section 3.5.1.1.3 that stated, "Portable and temporary cylinders and cylinders periodically replaced in safety-related areas are constructed and handled in accordance with applicable Department of Transportation requirements for seamless steel cylinders". The staff finds that the applicant has not addressed the COL item and described the control measures provided to prevent the impact of such missiles on safety-related SSCs.

NUREG/CR-3551 discusses how portable compressed gas cylinders pose a significant missile hazard if not properly controlled, secured or restrained. Implementation of controls will minimize missiles generated outside containment resulting from unsecured and non-seismically restrained compressed gas cylinders during a seismic event.

As requested in COL Item 3.5-8, the applicant is to establish/provide procedures or similar controls which ensure that pressurized gas cylinders be either removed or seismically restrained during power operation to prevent them from becoming missiles. Include this information in the FSAR and provide a markup in your response.

03.05.01.01-2

GDC 4, in part, requires SSCs to be protected from internally generated missiles. Maintenance equipment not secured or removed from an area is a potential gravitational missile source. Therefore, COL Item 3.5-8 was included in the COL FSAR to address controls to avoid unsecured maintenance equipment in safety-related building areas. To address this COL Item, the applicant proposed a revision COL/FSAR section 3.5.1.1.3 to indicate that safety-related SSCs in the vicinity of temporarily installed structures or components will be declared inoperable until the temporary structure or component is removed OR an evaluation to demonstrate no adverse impact can occur is performed.

The staff finds declaring safety related SSCs inoperable during maintenance acceptable, since such controls will minimize gravitational missiles generated

from equipment used for maintenance. It is not clear to the staff what analyses or controls are used to declare components inoperable when maintenance is being performed near S/R SSCs. Additionally, the staff has not received any evaluation and is unclear when the option of an evaluation will be performed to demonstrate no adverse impact.

As a result, the applicant has not addressed the COL item to describe any control measures to prevent the impact of such missiles on safety-related SSCs. As requested by COL action item, the applicant is to establish/provide procedures or similar controls which ensure that equipment, such as a hoist that is required during maintenance, be either removed or seismically restrained following maintenance to prevent it from becoming a missile. Include this information in the FSAR and provide a markup in your response.