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March 28, 2011

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ATTN: Document Control Desk  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

Subject: UniStar Nuclear Energy, NRC Docket No. 52-016  
Calvert Cliffs Nuclear Power Plant, Unit 3,  
Evaluation of Potential Accidents

The purpose of this letter is to provide supplemental information involving the Evaluation of Potential Accidents as discussed in Section 2.2.3 of the Final Safety Analysis Report (FSAR), as submitted in Part 2 of the Calvert Cliffs Nuclear Power Plant (CCNPP) Unit 3 Combined License Application (COLA), Revision 7.

During a recent internal working group meeting, it was identified that site-specific information related to the identification of potential hazards stemming from nearby industrial, transportation, and military facilities within the CCNPP Unit 3 site vicinity did not include an evaluation of a potential release involving the shipment and storage of carbon dioxide to the Calvert Cliffs Nuclear Power Plant Units 1 and 2. This inadvertent omission has been captured in the UniStar condition reporting system.

A hazard analysis was conducted in order to determine whether the impact of a postulated scenario involving the storage or transport of carbon dioxide at CCNPP Units 1 and 2 would result in a design-basis event for CCNPP Unit 3. Based on preliminary results, there were no postulated events involving the on-site storage or transport of carbon dioxide where an exceedance of the IDLH (40,000 ppm) would occur in the CCNPP Unit 3 control room. Therefore, the storage or transport of carbon dioxide at CCNPP Units 1 and 2 would not present a design-basis event for CCNPP Unit 3.

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The above results are preliminary and based on the following assumptions:

- Carbon dioxide is stored in an insulated tank at the 12 foot level of the CCNPP Unit 2 Turbine Building on the south west side (located approximately 2250 feet from the control room intake for CCNPP Unit 3).
- The storage quantity is 4 tons.
- The carbon dioxide delivery truck path is through the far southern end of the CCNPP Unit 1 and 2 property where the sally port is into the CCNPP Unit 1 and 2 protected area (placing the closest approach to the CCNPP Unit 3 control room that the delivery truck would make at approximately 900 feet).
- The amount of carbon dioxide on the delivery truck is 50,000 pounds. (Using this quantity, the frequency of shipment/delivery is not a factor and therefore, the assumption of quarterly delivery is not required.)

The finalized results of the hazardous chemical analysis and associated changes to the CCNPP Unit 3 COLA FSAR will be provided to the NRC by April 1, 2011.

Our response does not include any new regulatory commitments. This letter does not contain any sensitive or proprietary information.

If there are any questions regarding this transmittal, please contact me at (410) 470-4205, or Mr. Wayne A. Massie at (410) 470-5503.

*I declare under penalty of perjury that the foregoing is true and correct.*

Executed on March 28, 2011



Greg Gibson

cc: Surinder Arora, NRC Project Manager, U.S. EPR Projects Branch  
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