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10 CFR 50.4  
10 CFR 52.79

May 27, 2010

UN#10-140

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

Subject: UniStar Nuclear Energy, NRC Docket No. 52-016  
Response to Request for Additional Information for the  
Calvert Cliffs Nuclear Power Plant, Unit 3,  
RAI 232, Emergency Planning

Reference: Surinder Arora (NRC) to Robert Poche (UniStar Nuclear Energy), "FINAL  
RAI 232 NSIR EP 4479" email dated April 30, 2010

The purpose of this letter is to respond to the request for additional information (RAI) identified in the NRC e-mail correspondence to UniStar Nuclear Energy, dated April 30, 2010 (Reference). This RAI addresses Emergency Planning for Calvert Cliffs Nuclear Power Plant (CCNPP) Unit 3, as discussed in Part 5 of the CCNPP Unit 3 Combined License Application (COLA), Revision 6.

The enclosure provides our response to RAI 232, Question 13.03-38. Our response does not include any new regulatory commitments and does not impact COLA content. This letter does not contain any sensitive or proprietary information.

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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 May 27, 2010

A handwritten signature in black ink, appearing to read 'Greg Gibson', with a stylized, cursive script.

Greg Gibson

Enclosure: Response to NRC Request for Additional Information RAI 232, Question 13.03-38, Emergency Planning, Calvert Cliffs Nuclear Power Plant, Unit 3

cc: Surinder Arora, NRC Project Manager, U.S. EPR Projects Branch  
Laura Quinn, NRC Environmental Project Manager, U.S. EPR COL Application  
Getachew Tesfaye, NRC Project Manager, U.S. EPR DC Application (w/o enclosure)  
Loren Plisco, Deputy Regional Administrator, NRC Region II (w/o enclosure)  
Silas Kennedy, U.S. NRC Resident Inspector, CCNPP, Units 1 and 2  
U.S. NRC Region I Office

GTG/RDS/mdf

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**Enclosure**

**Response to NRC Request for Additional Information  
RAI 232, Question 13.03-38, Emergency Planning,  
Calvert Cliffs Nuclear Power Plant, Unit 3**

**RAI 232**

**Question 13.03-38**

Subject: Security-based Considerations

Regulatory Basis: 10 CFR 50.47; Appendix E to 10 CFR 50; Regulatory Guide 1.206, Section C.I.13.3.1

Acceptance Criteria: 1, 2, and 30

Regulatory Guide 1.206 requests that applicants for a combined license address the NRC orders issued February 25, 2002, as well as any subsequent NRC guidance, to determine what security-related aspects of emergency planning and preparedness are addressed in the emergency plan.

1. NRC Bulletin 2005-02, "Emergency Preparedness and Response Actions for Security-Based Events," provides guidance for a drill and exercise program to maintain the key skills necessary for mitigating a security-based event. Describe in the emergency plan, or provide reference to where this information is contained for conducting drills and exercises for a security-based event.
2. NRC Bulletin 2005-02, "Emergency Preparedness and Response Actions for Security-Based Events," provides guidance onsite protective measures during a security based event. Describe in the emergency plan, or provide reference to where this information is contained regarding a range of protective measures for site workers, as appropriate, during a security-based event (e.g., evacuation of personnel from target buildings, site evacuation by opening security gates, dispersal of licensed operators, sheltering of personnel in structures away from potential site targets, and arrangements for accounting for personnel after attack).

**Response**

1. NRC Bulletin 2005-02, "Emergency Preparedness and Response Actions for Security-Based Events," states the following:

EP drill and exercise programs should be used to maintain the key skills necessary for mitigating security-based events. Licensees should expect to conduct a NRC-observed off-year drill within 3 years of the completion of a pilot exercise program being developed by NRC. Following performance of the NRC-observed security-based drill or exercise, licensees would be expected to demonstrate security-based EP program activities ***under the major element schedule*** [emphasis added] as committed to in their emergency plans.

The pilot exercise program was completed and licensed utilities have conducted their NRC observed off-year hostile action based drill. NRC Bulletin 2005-02 also states:

The long-term expectations are that each site will demonstrate an emergency response to a terrorist event at least ***once during the 6-year exercise cycle*** [emphasis added].

Section N.1 of the CCNPP Unit 3 Emergency Plan states; "Exercises are conducted to ensure that all major elements of the E-Plan and preparedness program are demonstrated at least once in each six-year period." This is consistent with the intent of the bulletin.

Due to the scope of hostile action based scenarios necessitating the participation of offsite agencies, the NRC is seeking new rulemaking with regard to the definition and objectives required of all types of exercise scenarios evaluated throughout the six year cycle. FR 23254 [NRC-2008-0122], 05/18/09, Section II, discussion, Subsection 6, Challenging Drills and Exercises, states the following:

In the unlikely event that a licensee faces a hostile action event, the response organization will encounter challenges that differ significantly from those practiced in long-standing drill and exercise programs because these programs have not included hostile action event scenarios. The NRC regulations addressing this issue are general in nature and do not explicitly require licensees to include hostile action event scenarios in drills and exercises, nor do they directly allow the NRC to require specific scenario content. The NRC believes that its regulations should be revised to do so.

The existing wording of the CCNPP Unit 3 Emergency Plan is in compliance with current regulation and meets the intent of NRC Bulletin 2005-02. The CCNPP Unit 3 Emergency Plan will be revised as necessary when changes to the current regulations are enacted.

2. NRC Bulletin 2005-02, "Emergency Preparedness and Response Actions for Security-Based Events," states the following:

Licensees should consider the following measures as part of a range of protective measures for site workers and apply them as appropriate, although they may not be suitable in all circumstances:

- evacuation of personnel from target buildings (including security personnel)
- site evacuation by opening (while continuing to defend) security gates
- dispersal of licensed operators
- sheltering of personnel in structures away from potential site targets
- arrangements for accounting for personnel after the attack

It is expected that site-specific arrangements, such as the location of workers in relation to potential targets, will dictate the appropriateness of sheltering versus evacuation. It should be noted that sheltering inside target buildings may not provide the intended personnel protection. **Procedures should be modified** [emphasis added] to ensure that plant page announcements accomplish the onsite protective measures deemed appropriate.

Section J.4 of the CCNPP Unit 3 Emergency Plan states, "Evacuation shall commence in accordance with site procedures as directed by the Emergency Plant Manager or his/her designee, unless one of the following conditions exist:.....c. There is a security threat occurring, which would have an adverse impact on the personnel while leaving the site." This statement is consistent with the intent of the bulletin.

Further specific details with regard to the five bullets in the bulletin are appropriate for emergency plan implementing procedures. These procedures have not yet been developed for CCNPP Unit 3. However, Emergency Planning ITAAC contained in COLA Part 10, Table 2.3-1, include an inspection to confirm that implementing procedures for the CCNPP Unit 3 Emergency Plan were submitted to the NRC no less than 180 days prior to fuel load.

**COLA Impact**

The COLA will not be revised as a result of this response.