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October 29, 2009

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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  
Responses to Environmental Report Questions  
Regarding Combined License Application (COLA) Revision 5 Changes

The purpose of this letter is to provide responses to NRC Staff questions regarding changes reflected in Combined License Application (COLA) Revision 5. The first question involves a change in the number shown for the acres of impervious surfaces in the Environmental Report of the CCNPP Unit 3 COLA. The second question involves a change in the number of acres of land impacted by the construction of CCNPP Unit 3.

The enclosure provides the UniStar Nuclear Energy (UNE) responses to these questions and includes revised COLA content. A Licensing Basis Document Change Request has been initiated to incorporate the changes into a future revision to the COLA. This response does not include any new regulatory commitments and does not contain any sensitive or proprietary information.

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NRO

If there are any questions regarding this transmittal, please contact me at (410) 470-4205, or Mr. Dimitri Lutchenkov at (410) 470-5524.

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

Executed on October 29, 2009

A handwritten signature in black ink, appearing to read 'Greg Gibson', with a stylized flourish at the end.

Greg Gibson

Enclosure: Responses to Environmental Report Questions Regarding Combined  
License Application (COLA) Revision 5 Changes, 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

**Enclosure**  
**Responses to Environmental Report Questions**  
**Regarding Combined License Application (COLA) Revision 5 Changes**  
**Calvert Cliffs Nuclear Power Plant Unit 3**

## Question

### Impervious Surfaces

In a September 15, 2009, teleconference, the NRC inquired about a change in the number of acres of impervious surfaces in the CCNPP Unit 3 COLA. Revision 5 of the COLA reflects a change from 333 acres to 130 acres for the amount of impervious surfaces.

## Response

The following tabulation shows how the impervious surfaces acreage number has changed in the CCNPP Unit 3 COLA:

CCNPP Unit 3 COLA Revision	ER Section 4.2.1.5	ER Section 4.2.2.2	ER Section 4.3.2.1	ER Section 4.3.2.1
COLA Rev. 0 Transmitted in UniStar letter UN#07-008, dated July 13, 2007	333 acres	333 acres	333 acres (pg. 4.3-15)	133 acres (pg. 4.3-16)
COLA Rev. 2 Transmitted in UniStar letter UN#08-003, dated March 14, 2008	333 acres	333 acres	333 acres (pg. 4.3-15)	133 acres (pg. 4.3-16)
COLA Rev. 3 Transmitted in UniStar letter UN#08-025, dated August 1, 2008	333 acres	333 acres	333 acres (pg. 4.0-52)	133 acres (pg. 4.0-54)
COLA Rev. 4 Transmitted in UniStar letter UN#09-125, dated March 9, 2009	333 acres	333 acres	333 acres (pg. 4-49)	133 acres (pg. 4-50)
COLA Rev. 5 Transmitted in UniStar letter UN#09-308, dated June 30, 2009	130 acres	130 acres	130 acres (pg. 4-63)	130 acres (pg. 4-65)
COLA Rev. 6 Transmitted in UniStar letter UN#09-385, dated September 30, 2009	130 acres	130 acres	130 acres (pg. 4-58)	130 acres (pg. 4-59)

As shown in the tabulation above, there was an internal inconsistency in COLA revisions 0 through 4. The impervious surfaces acreage number was given as 333 acres in Environmental Report (ER) Sections 4.2.1.5, 4.2.2.2, and 4.3.2.1 and as 133 acres in later paragraphs of ER Section 4.3.2.1. Input from the constructor dated August 7, 2008, provided information indicating that the “permanently used areas” acreage number was 130 acres. The following simplified tabulation is an excerpt from the data provided by the constructor:

<b><u>Permanently Used Areas</u></b>	130 Acres
<b><u>Impervious Areas</u></b>	55 Acres

Revisions 5 and 6 of the COLA reflect the “permanently used areas” number of 130 acres shown in the tabulation above as the area of impervious surfaces. The decision to use 130

acres as the area of impervious surfaces is conservative, as the permanently used areas consist of impervious and relatively impervious surfaces. The identification of 130 acres as the area of impervious surfaces is correct in the CCNPP Unit 3 COLA.

The technical report which was transmitted to the Maryland Public Service Commission (PSC) in the November 13, 2007, Certificate of Public Convenience and Necessity (CPCN) application reflected the 333 acre number (of impervious and relatively impervious surfaces) in Sections 5.4.1.4 and 5.4.2.2 of the report and the 133 acre number in Section 5.6.2.1 of the report. The CPCN contained the same 333 acre and 133 acre mismatch reflected in COLA revisions 0 through 4. A revised technical report, dated August 8, 2008, which was transmitted to the PSC in a letter of the same date, contains the 130 acres (of impervious surfaces) in Sections 5.4.1.4, 5.4.2.2, and 5.6.2.1. In 2008, the CPCN was leading the COLA in regard to submission schedule and, as such, incorporated the correction prior to the COLA. The change from 333 acres to 130 acres, for the amount of impervious surfaces, was made in the CPCN (August 8, 2008 report) before it was made in COLA Revision 4 or 5.

### **COLA Impact**

ER Section 4.2.1.5, 4.2.2.2, and 4.3.2.1 of the CCNPP Unit 3 COLA will be revised as follows in a future COLA revision to correct an editorial error (addition of a comma):

Construction impacts to the existing surface water bodies are summarized as follows:

- Increasing runoff from the approximately 130 acres (53 hectares) of impervious surfaces (including the power block, switchyard, cooling tower, laydown areas, critical areas, and roads).

ER Section 4.3.2.1 of the CCNPP Unit 3 COLA will be revised as follows in a future COLA revision:

Several other drainages and impoundments at the CCNPP site will be moderately to severely impacted. It is possible, and even likely, that some sediment will be deposited in wetlands, including impoundments and stream channels, with rainfall runoff during and immediately following construction. Best construction management practices will reduce the amount of erosion and sedimentation associated with construction, however, and would limit impacts to aquatic communities in down-gradient water bodies. Although unlikely, it is also possible that excavated soil placed in the proposed spoils and overflow storage area will be disturbed and move with runoff into streams onsite. Details are summarized herein:

- Increased runoff from 130 acres (53 hectares) of impervious surfaces (including the power block, switchyard, laydown areas, critical areas, cooling tower, and roads).

### Question

#### Land area impacted by the construction of CCNPP Unit 3

In a September 15, 2009, teleconference, the NRC inquired about a change in the number of acres that CCNPP Unit 3 will occupy. Revisions 5 and 6 of the COLA reflect a change from 420 acres to 460 acres for the area that the site will occupy.

### Response

COLA FSAR Section 2.1.1.1 and ER Sections 1.3.2, 3.1, 4.1.1.1, 4.2.1.2, 9.3.1.2, and 10.1.3 reflect the change from 420 acres to 460 acres for the area that the site will occupy.

The 460 acre was developed as shown in the following tabulation:

<u>Disturbed Area</u>	
Existing Laydown Areas:	70 Acres
Proposed Spoils Area:	46 Acres
Remainder of Site:	344 Acres
Total:	460 Acres

Investigation into this acreage change indicates that the technical report which was transmitted to the Maryland Public Service Commission in the November 13, 2007, CPCN application reflected the 420 acre number. The revised technical report, dated August 8, 2008, which was transmitted to the Maryland Public Service Commission in a letter of the same date provides the 460 acre number with the following excerpt of explanation in relation to the subject acreage change:

The Co-Applicants would note that they are continuing to work with numerous regulatory agencies to address areas of concern, and to refine site plans and site use. These continuing efforts may have an impact on the final site plan, and may increase the total number of acres used.

The 460 acre number for the area that the site will occupy is correct in the CCNPP Unit 3 COLA.

### COLA Impact

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