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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 NRC Telecom Questions Regarding Combined
License Application (COLA) Revision 6, Environmental Report

The purpose of this letter is to provide responses to NRC Staff questions regarding several statements included in the Calvert Cliffs Nuclear Power Plant, Unit 3 Combined License Application (COLA) Revision 6, Environmental Report.

In a teleconference with NRC Staff on November 6, 2009, Question 1 was raised soliciting clarification of statements related to the overall period of construction, including both the preconstruction period and the construction period for the Calvert Cliffs Nuclear Power Plant, Unit 3. In a teleconference with NRC Staff on November 12, 2009, Question 2 was raised relating to inconsistencies in the description of Construction Areas described in ER Table 4.1.1 and in ER Section 4.6.

Enclosure 1 provides our responses to these questions and includes revised COLA content. A Licensing Basis Document Change Request has been initiated to incorporate these changes into a future revision to the COLA.

One new regulatory commitment is made in this response and is summarized in Enclosure 2. This letter does not contain any sensitive or proprietary information.

D096
MRO

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 December 4, 2009

A handwritten signature in black ink, appearing to read 'Greg Gibson', with a long horizontal stroke extending to the right.

Greg Gibson

Enclosures: 1) Responses to NRC Telecom Questions 1 and 2 Regarding
 Combined License Application (COLA) Revision 6, Calvert Cliffs Nuclear
 Power Plant Unit 3, Environmental Report

 2) Regulatory Commitment CC-09-0008

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

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Commitment: CC-09-0008

Enclosure 1

**Responses to NRC Telecom Questions 1 and 2 Regarding
Combined License Application (COLA) Revision 6, Calvert Cliffs
Nuclear Power Plant Unit 3, Environmental Report**

Question 1

Construction Period

NRC Staff presented several questions during a teleconference on November 6, 2009. It was observed that the CCNPP COLA Rev. 6 ER Chapter 4 appears to have contradictory statements relating to the period of construction.

The last paragraph on page 4-22 contains the statement, "The effects of increased withdrawal, even though limited to about 68 months for the duration of Unit 3 construction..." Additionally, the note in Table 4.4-3 (on page 4-92) contains text indicating, "...construction period is estimated to be 68 months." However, Table 4.6-2 on page 4-147, referring to Section 4.2.1.3 states, "...a planned 86 months of construction, of which 23% is preconstruction." This NRC question relates to the estimated duration of the construction and preconstruction periods.

In reviewing this question it was also observed on page 4-141 that the 86 month period was referred to in a statement in the last paragraph which reads, "The water usage predicted for the first 20 months of the 86 month CCNPP Unit 3 construction period is allocated to preconstruction activities." It was also found that Section 4.7.2 on page 4-154 refers to "...the annual average TRCs over the 68 months of pre-construction and construction activities..." and on page 4-155 reference to, "the pre-construction and construction period of 68 months."

Response

The statements on page 4-22, Table 4.4-3, and Table 4.6-2 are not contradictory. The 86 month period mentioned refers to the overall period for activities which includes the estimated period of 68 months for construction as well as a time period for preconstruction activities. The preconstruction period, which is variously approximated as 23% of the 86 month period and also as 20 months, is the period of time estimated for site preparation activities, which could overlap the 68 month construction period. The 68 month construction period is the currently estimated period necessary for actual construction of the safety-related structures and other plant components.

As the engineering of the facility progresses the estimates of the time required for various construction activities is refined with a concurrent objective of reducing the elapsed time necessary for all aspects of the plant construction. In this regard the overall 86 month period as well as the 68 month period can be currently considered as bounding values.

The statements on pages 4-154 and 4-155 incorrectly include preconstruction activities in the estimated 68 month construction period and will be amended.

COLA Impact

ER Section 4.7.2 of the CCNPP Unit 3 COLA will be revised as follows in a future COLA revision to correct the aforementioned statements on pages 4-154 and 4-155:

4.7.2 Occupational Health

The Bureau of Labor Statistics maintains records of a statistic known as total recordable cases (TRC), which are a measure of annual work-related injuries or illnesses that include death, days away from work, restricted work activity, medical treatment beyond first aid, and other criteria.

The 2005 nationwide TRC rate published by the Bureau of Labor Statistics for utility system construction is 5.6 per 100 workers (BLS, 2005a). The same statistic for the State of Maryland is 6.3 per 100 workers (BLS, 2005b). Calvert Cliffs 3 Nuclear Project and UniStar Nuclear Operating Services have calculated the TRC incidence for the proposed construction site. Using the monthly employment numbers and the national and Maryland TRC rates, monthly TRCs were estimated from which an average monthly rate was developed. The average monthly rate was then used to calculate the annual average TRCs over the 68 months of ~~pre-construction and~~ construction activities, the estimates are as follows:

The Bureau of Labor Statistics published 2005 statistics for fatal occupational injuries (BLS, 2005c) and average employment (BLS, 2005a) that were used to calculate the nationwide annual rate of fatal occupational injuries for utility system construction. Using monthly construction employment predictions and the calculated rate 0.027%, it is estimated that 4 construction deaths could occur over the ~~pre-construction and~~ construction period of 68 months.

Question 2

Construction Area

NRC Staff, in a teleconference on November 12, 2009, questioned inconsistencies in the construction areas listed in the CCNPP Unit 3 COLA Rev. 6, ER Section 4.0 Table 4.1-1, Construction Areas Acreage and Operations Acreage, Land Use and Zoning and those stated in ER Section 4.6, Construction Area. These inconsistencies include the areas stated for the total developed area, the UHS Intake Structure, the 500kV Switchyard, the Transmission Corridor, the Power Block, the Cooling Tower and the Desalinization Plant.

Response

The areas stated in ER Section 4.6 (pg. 4-141) are correct values. The values contained in Section 4.0 Table 4.1-1 require updating to reflect the zoning status of the construction areas listed in the CCNPP Unit 3 COLA Rev. 6. Table 4.1-1 will be submitted to the appropriate technical resource to obtain current values for construction affected areas.

COLA Impact

Table 4.1-1 will be revised and included in COLA Revision 7.

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Enclosure 2
Regulatory Commitment

The regulatory commitment in this correspondence is summarized below:

Regulatory Commitment No.	Regulatory Commitment Description	Regulatory Commitment Due Date
CC-09-0008	ER Table 4.1-1 will be revised to reflect the zoning status of the construction areas listed in the CCNPP Unit 3 COLA Rev. 6.	The table will be included in COLA Revision 7.