Greg Gibson Vice President, Regulatory Affairs



10 CFR 50.4 10 CFR 52.79

September 25, 2009

UN#09-396

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

RAI No. 1014, Ozone Air Emissions during Construction and Operation

Reference:

1) Laura Quinn (NRC) to Greg Gibson (UniStar Nuclear Energy), Request for Additional Information Related to the Environmental Report for the Calvert Cliffs Combined License Application — Ozone Air Emissions during Construction and Operation, dated August 27, 2009.

The purpose of this letter is to respond to the request for additional information (RAI) identified in NRC letter to UniStar Nuclear Energy, dated August 27, 2009 (Reference 1). RAI No. 1014 requests information related to the ozone air emissions during construction and operation of Calvert Cliffs Nuclear Power Plant (CCNPP) Unit 3.

Enclosure 1 provides the response to RAI No. 1014. Enclosure 2 contains a report of Construction Activities and Air Impacts used in support of the RAI response. This response does not impact the Combined License Application content. One new regulatory commitment is made in this response and is summarized in Enclosure 3.



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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 September 25, 2009

Greg Gibson

Enclosures:

- Response to NRC Request for Additional Information, RAI No. 1014, Ozone Air Emissions during Construction and Operation, CCNPP3
- 2) Report of the Construction Activities and Air Impacts from the Proposed Unit 3 at Calvert Cliffs Nuclear Power Plant, dated August 2008
- 3) Regulatory Commitment CC-09-0002
- 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

Commitment:

CC-09-0002

Enclosure 1

Response to NRC Request for Additional Information
RAI No. 1014, Ozone Air Emissions during Construction and Operation
Calvert Cliffs Nuclear Power Plant Unit 3

RAI No 1014

The NRC is required to make a conformity determination under 40 CFR 93.150 et seq. with regard to the proposed construction and operation of Calvert Cliffs Unit 3 (CCNP Unit 3) unless one or more of the exceptions listed in 40 CFR 93.153 applies. A possible exception for CCNPUnit 3 is if the totals of direct and indirect emissions are below threshold values listed in 40 CFR93.153(b).

UniStar has provided the Maryland Public Service Commission with a tentative schedule for completion and operation of CCNP Unit 3 (CPCN Application Table 1.4-1), with an extensive listing of emissions during plant construction (CPCN Application Tables 5.5-2 and 5.5-3), and with a listing of maximum expected emissions during normal operation (CPCN Application Table 6.5-2). The NO_x emissions during the construction period listed in Table 5.5-2 exceed the 40 CFR 93.153(b) threshold value for the first four years. However, the construction activities that would be authorized by the NRC (as defined in 10 CFR 50.10) are only a subset of the activities covered by Table 5.5-2. Provide, for each class of emissions and year of construction, the annual quantity released (tons/yr), the percentages that would be related to "construction" activities regulated by NRC, and the basis for determining the percentage.

Response

RAI No. 1014 is based on outdated information contained in the Certificate of Public Convenience and Necessity (CPCN) Technical Report filed with the Maryland Public Service Commission (PSC) in November 2007. A second amendment to the CPCN Technical Report was submitted to the Maryland PSC in August 2008. Section 5.5 of the August 2008 CPCN Technical Report references a separate report documenting revised construction emissions and associated air impacts (Appendix, Revision 3, Volume 9, Tab 28). This report entitled, "Report of the Construction Activities and Air Impacts from the Proposed Unit 3 at Calvert Cliffs Nuclear Power Plant" dated August 2008 and provided as Enclosure 2 to this response, shows that construction related NOx emissions in the first four years of construction are between 57 and 82 tons per year (see Table 2-2). These values are below the 40 CFR 93.153(b) threshold value that would trigger a conformity determination for CCNPP Unit 3. Calvert County is part of the Washington DC-MD-VA ozone nonattainment area which has a severity classification of moderate per 40 CFR 81.321. The applicable threshold value for NOx emissions (as an ozone precursor) is 100 ton per year threshold.

The above mentioned report on construction emissions was not done for purposes of a conformity applicability analysis. Rather it was prepared in support of the CPCN technical studies to evaluate the impact of site construction emissions. It did not address indirect emissions from activities outside the construction site that would be included in a formal conformity determination, such as offsite commercial deliveries and commuter vehicles. Also, UNE has more recent information on construction activities. Therefore, UNE will prepare an updated construction emissions analysis for CCNPP Unit 3 in order to determine if emissions are still within threshold values. UNE will provide the NRC with the schedule for completion of this emissions analysis by October 2, 2009.

COLA Impact

No changes to the CCNPP Unit 3 COLA are required as a result of this RAI response.