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10 CFR 50.4  
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June 5, 2009

UN#09-277

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 No. 105, Communications Systems

- References:
- 1) John Rycyna (NRC) to Robert Poche (UniStar Nuclear Energy), "RAI No 105 ICE 1628.doc (PUBLIC)" email dated April 22, 2009
  - 2) UniStar Nuclear Energy Letter UN#09-247, from Greg Gibson to Document Control Desk, U.S. NRC, Submittal of Response to RAI No. 105, Communications Systems, dated May 22, 2009

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 22, 2009 (Reference 1). This RAI addresses Communications Systems, as discussed in Section 9.5.2 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 4.

Reference 1 requested UniStar Nuclear Energy to respond to the RAI within 30 days. Reference 2 stated that a response to RAI No. 105, Question 09.05.02-3 would be provided by June 5, 2009. The enclosure provides our response to RAI No. 105, Question 09.05.02-3, and includes revised COLA content.

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A Licensing Basis Document Change Request has been initiated to incorporate these changes into a future revision of the COLA. Our response to Question 09.05.02-3 does not include any new regulatory commitments.

If there are any questions regarding this transmittal, please contact me at (410) 470-4205, or Mr. Michael J. Yox at (410) 495-2436.

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

Executed on June 5, 2009



Greg Gibson

Enclosure: Response to NRC Request for Additional Information RAI No. 105, Question 09.05.02-3, Communications Systems, Calvert Cliffs Nuclear Power Plant, Unit 3

cc: John Rycyna, NRC Project Manager, U.S. EPR COL Application  
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/kat

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**Enclosure**

**Response to NRC Request for Additional Information  
RAI No. 105, Question 09.05.02-3, Communications Systems  
Calvert Cliffs Nuclear Power Plant, Unit 3**

**RAI No. 105**

**Question 09.05.02-3**

Demonstrate that Bulletin 80-15 has been addressed in the Emergency Communications System design. Specifically, provide information regarding what backup power sources are available for the Emergency Notification System and its interfaces.

The staff reviewed Section 9.5.2 of the U.S. EPR DC-FSAR. The staff found that Bulletin 80-15 had not been addressed in the DC-FSAR. The staff requested that AREVA provide information to demonstrate Bulletin 80-15 had been addressed as required by 10 CFR 50.54(f). NRC Bulletin 80-15 states that licensees should address Emergency Notification System backup power availability in case of loss-of-offsite power. In response, AREVA stated that the power source for the emergency offsite communication system, including backup power, will be addressed by the COL Applicant. This COL applicant responsibility is included in the proposed new COL Item 9.5-21, which states: "a COL applicant that references the U.S. EPR design certification will provide a description of the offsite communication system that interfaces with the onsite communication system." What backup power sources are available in the Calvert Cliffs Nuclear Power Plant design for the Emergency Notification System and its interfaces?

**Response**

Bulletin 80-15 was issued to address a potential loss of ENS communications due to a loss of offsite power. At that time, the telecommunications systems and technologies were significantly different than they are today.

In SECY-98-0194, "Upgrading the NRC Operations Center Emergency Telecommunications System," the NRC staff identified options for more efficiently providing ETS services for nuclear power plants. The option supported by the staff and approved by the Commission in Staff Requirement Memorandum (SRM) dated December 9, 1998; involved using preexisting licensee communications networks to provide access to long distance service in a manner that would be independent of the local telephone company's switch. Booz-Allen Hamilton's (BAH's) study and NRC's survey of representative licensee sites indicated that most utilities had established corporate telecommunications capabilities which already provided independent access to long distance networks (i.e., avoided the local telephone company's switch). Therefore, ETS functionality could be provided over corporate networks at minimal additional cost to licensees and would eliminate the large recurring government costs associated with the NRC's dedicated circuits. This upgrade was implemented in FY 2001 as part of FTS 2001, a follow-on contract to FTS 2000. This is also discussed in RIS 2000-011.

The configuration of the current NRC Emergency Telephone System (ETS) ENS line is a two-wire system, similar to a domestic phone system, which is configured as a "non-local serving wire center" analog telephone path.

As such, the Calvert Cliffs Nuclear Power Plant Unit 3 ENS line will be powered locally from either a safety-related or non safety-related power source with an uninterruptible power source (UPS) having either a battery or generator backup. The system would be routed through the site PBX which provides access to multiple paths for call routing. The long distance portion of the line is provided for and paid by the NRC using direct access lines (DALs) to the federal long distance service directed through a toll-free (800/888) exchange. The current ETS design using

DALs to bypass the local telephone switch ensures that emergency calls can be made even if the local telephone switch is congested or out of service.

### COLA Impact

FSAR Table 1.8-2 will be updated as follows in a future COLA revision:

**Table 1.8-2 – FSAR Sections that Address COL Items**

Item No.	Description	Section
9.5-21	<u>A COL applicant that references the U.S. EPR design certification will provide a description of the offsite communication system that interfaces with the onsite communication system.</u>	9.5.2.1.1

FSAR Section 9.5.2.1 will be updated as follows in a future COLA revision:

#### 9.5.2.1 Design Basis

~~No departures or supplements.~~ This section of the U.S. EPR FSAR is incorporated by reference with supplements as identified in the following section.

##### 9.5.2.1.1 10 CFR 50 Appendix E, Emergency Planning and Preparedness for Production and Utilization Facilities

The U. S. EPR FSAR includes the following COL Item in Section 9.5.2.1.1:

A COL applicant that references the U.S. EPR design certification will provide a description of the offsite communication system that interfaces with the onsite communication system.

This COL item is addressed as follows:

{The Emergency Notification System (ENS) is powered locally from either a safety-related or non safety-related power source with a UPS, having either battery or generator backup. The ENS is routed through the site PBX to provide access to multiple outbound call paths. The long distance portion of the system is provided by the NRC using direct access lines (DALs) to the federal long distance service directed through a toll-free (800/888) exchange.}