From:	Wang, Alan
To:	BURMEISTER, BARRY M; Joseph Clark (JCLARK@entergy.com)
Cc:	Lent, Susan; Burkhardt, Janet
Subject:	Request for Addtional Information PROPOSED CHANGES TO TECHINCAL SPECIFICATION 3.8.1; "AC SOURCES - OPERATING" (TAC NO. ME7695)
Date:	Monday, May 21, 2012 9:05:24 AM

Barry and Joey,

By letter dated December 8, 2011 (Agencywide Documents Access and Management System Accession No. ML11348A237), Entergy Operations, Inc (Entergy, the licensee) submitted Entergy Letter RBG-47191, “License Amendment Request Technical Specifications (TS) 3.8.1 ;"AC Sources - Operating." In this letter, Entergy submitted a request to revise Technical Specification (TS) 3.8.1 and the associated Bases, to expand TS scope to include provisions for testing of the automatic transfer function from the station 22 kV bus to offsite power for Division I1l. This Surveillance Requirement (SR) is being added to ensure availability of offsite power after loss of the station (onsite) 22 kV bus when offsite power remains available.
The NRC staff has determined that the following additional information is needed to complete our review. This request was discussed with Mr. Barry Burmeister of your staff on May 17, 2012, and it was agreed that a response would be provided by within 60 days of receipt of email. If circumstances result in the need to revise the requested response date, please contact me at (301) 415-1445 or via e-mail at Alan.Wang@nrc.gov.

1. Provide a discussion of the effects of supplying power to non-safety related bus 1NNS-SWG1C from the 1STX-XNS1C transformer under both normal and emergent conditions during all MODES of operation. Also discuss the available capacity for this new configuration (e.g., provide the expected loading and the transformer ratings).

2. On Page 1 of Attachment 1 of the LAR, the licensee stated that REQUIRED ACTION A.2 will state:

   > Verify E22-S004 will transfer to the preferred station transformer powered by the OPERABLE offsite circuit.

   However, the TS Markup that the licensee provided for REQUIRED ACTION A.2 on Page 2 of Attachment 2 of the LAR states:

   > Verify E22-S004 is aligned to transfer to the preferred station transformer powered by the OPERABLE offsite circuit.

   Please provide the following:

   a) Clarify which of the two proposed versions for REQUIRED ACTION A.2 is being requested.

   b) Explain how either of these proposals will ensure that the automatic transfer function is verified.

3. On Page 2 of Attachment 1 of the LAR, the licensee stated that a new surveillance

requirement (SR) will be added as SR 3.8.1.9. Based on its review of this statement and the proposed TS Markup Page 3 of Attachment 2 of the LAR, the NRC staff did not locate any further information for a new SR 3.8.1.9. Clarify whether you intended to reference new SR 3.8.1.8 instead of SR 3.8.1.9.

4. On Page 2 of Attachment 1 of the LAR, the licensee stated that the new SR will contain the following language:

> Verify automatic transfer of bus E22-S004 through NNS-SWG1A or NNS-SWG1B from the 22 kV onsite circuit to required alternate offsite circuit.

However, the TS Markup that the licensee provided for SR 3.8.1.8 on Page 2 of Attachment 2 of the LAR states:

a) Verify manual transfer of unit power supply from the normal offsite circuit to required alternate offsite circuit.

b) Verify automatic transfer of bus E22-S004 through NNS-SWG1A or NNS-SWG1B from the 22 kV onsite circuit to required offsite circuit.

Clarify which of the two proposed versions for SR 3.8.1.8 is being requested.

5. On Page 2 of Attachment 1 of the LAR, the licensee stated that a NOTE will be added to the new SR that states:

> Only required to be met if 22 kV onsite circuit is supplying Division III safety related bus E22-S004 through NNS-SWG1A or NNS-SWG1B 4.16 kV buses from normal power transformer STX-XNS1C.

However, the TS Markup that the licensee provided for SR 3.8.1.8 on Page 2 of Attachment 2 of the LAR states:

1. This Surveillance shall not be performed in MODE 1 or 2. However, credit may be taken for unplanned events that satisfy this SR.

2. SR 3.8.1.8.b is only required to be met if 22 kV onsite circuit is supplying Division III safety related bus E22-S004 from normal power transformer STX-XNS1C.

Clarify which of the two proposed versions for the SR 3.8.1.8 NOTE is being requested.

6. In the event of either a Fast or Slow automatic transfer of bus 1NNS-SWG1C, explain how 1NNS-SWG1A and 1NNS-SWG1B will be prevented from cross-connecting to each other.

7. On page 8-5 of NUREG-0989, “Safety Evaluation Report related to the operation of River Bend Station,” the staff identified a concern with the potential interaction between the automatic transfer schemes at the 4160 volt non-safety related buses and the automatic starting logic of the diesel generators on the safety-related buses. Provide a detailed discussion that explains how you have resolved the NRC staff’s concerns.

8. In NRC Inspection Report 50-458/40-200, dated August 1, 1990, NRC inspectors found potential issues that could exist at RBS in relation to the postulated failures of the high pressure cooling system pump motors and standby service water 3 pump motors that could result from high transient currents generated during the fast transfer of the Division 3 bus to offsite power. Provide a detailed discussion that explains how you have analyzed and resolved the issues described in this document. For additional information the licensee can review Task Interface Agreement (TIA) 2007-02 (ML073440280), where the NRC staff evaluated a fast transfer scheme of the Palisades Nuclear Plant. In the TIA, the NRC staff discussed the potential for excessive current transients and shaft torques which can damage operating essential equipment and the potential for the safety-related buses to experience greater than 1.33 per unit volts/hertz ratio due to the fast transfer scheme.