## ArevaEPRDCPEm Resource

From:	Snyder, Amy
Sent:	Wednesday, October 17, 2012 1:09 PM
То:	'usepr@areva.com'
Cc:	Kang, Peter; Anderson, James; Mitra, Sikhindra; Segala, John; ArevaEPRDCPEm Resource
Subject:	Draft - U.S. EPR Design Certification Application RAI No. 564 (6901), FSAR Ch. 8
Attachments:	Draft RAI_EEB_6901.doc

Attached please find draft RAI No. 564 regarding your application for standard design certification of the U.S. EPR. If you have any question or need clarifications regarding this RAI, please let me know as soon as possible, I will have our technical Staff available to discuss them with you.

Please also review the RAI to ensure that we have not inadvertently included proprietary information. If there are any proprietary information, please let me know within the next ten days. If I do not hear from you within the next ten days, I will assume there are none and will make the draft RAI publicly available.

Thanks,

Amy

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Options	
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# Draft

### Request for Additional Information 564 Issue Date: 10/17/2012 Application Title: U. S. EPR Standard Design Certification - Docket Number 52-020 Operating Company: AREVA NP Inc. Docket No. 52-020 Review Section: 08.02 - Offsite Power System Application Section:

#### QUESTIONS

### 08.02-8

On July 27, 2012, the NRC issued Bulletin 2012-01, "Design Vulnerability in Electric Power System," (Agencywide Documents Access and Management System (ADAMS) Accession Number ML12074A115) to all holders of operating licenses and combined licenses for nuclear power reactors requesting information about the facilities' electric power system designs, in light of the recent operating experience that involved the loss of one of the three phases of the offsite power circuit (single-phase open circuit condition) at Byron Station, Unit 2 to verify compliance with applicable regulations and to determine if further regulatory action is warranted.

In order to verify the applicants of new reactors have addressed the design vulnerability identified at Byron in accordance with the requirements specified in General Design Criterion (GDC) 17, "Electric Power Systems," in Appendix A, "General Design Criteria for Nuclear Power Plants," and the design criteria for protection systems under 10 CFR 50.55a(h)(3), please provide the following information:

- Describe the protection scheme design for important to safety buses (31-34BDA) to detect and automatically respond to a single-phase open circuit condition or high impedance ground fault condition on credited offsite power circuits.
- If the important to safety buses are not powered by offsite power sources during at power condition, explain how the surveillance tests (e.g., SR 3.8.1.1) are performed to verify that a single-phase open circuit condition or high impedance ground fault condition on an off-site power circuit is detected.
- Describe the plant operating procedures including off-normal operating procedures, specifically calling for verification of the voltages on all three phases of the ESF buses.