

## **NRR-PMDAPEm Resource**

---

**From:** Watford, Margaret  
**Sent:** Friday, September 11, 2015 4:04 PM  
**To:** Thomas.N.Weber@aps.com  
**Cc:** Michael.Dilorenzo@aps.com  
**Subject:** Request for Additional Information - PVNGS, Unit 2 License Amendment Request for CEA 88 (MF6678)  
**Attachments:** Request for Additional Information on PVNGS, Unit 2 Exigent LAR to Amendment SR 3.1.5.3 for CEA 88 (MF6678).pdf

Tom,

By letter dated September 4, 2015 (Agencywide Document Access and Management System (ADAMS) Accession No. ML15247A518), Arizona Public Service Company (APS or the licensee) submitted a license amendment request to the U.S. Nuclear Regulatory Commission (NRC) to revise the Technical Specifications (TS) Surveillance Requirement (SR) 3.1.5.3 for Palo Verde Nuclear Generating Station, Unit 2. The proposed amendment would add a Note to SR 3.1.5.3, Control Element Assembly (CEA) freedom of movement surveillance, to eliminate exercising CEA 88 for the remainder of operating Cycle 19 for Unit 2, currently scheduled to end in fall 2015.

Based on the review of the amendment request, the NRC staff has determined that additional information is required regarding the exclusion of CEA 88 from SR 3.1.5.3. Please see the formal request for additional information (RAI) in the attached document. A clarification call was held on September 11, 2015 to ensure APS understood the RAIs. In the clarification call, APS agreed to submit the response to the RAIs on September 15, 2015.

Thank you,

**Maggie Watford**

Project Manager, Plant Licensing Branch IV-I  
Division of Operating Reactor Licensing  
U.S. Nuclear Regulatory Commission  
Phone: 301-415-1233  
Email: [Margaret.Watford@nrc.gov](mailto:Margaret.Watford@nrc.gov)

**Hearing Identifier:** NRR\_PMDA  
**Email Number:** 2377

**Mail Envelope Properties** (Margaret.Watford@nrc.gov20150911160300)

**Subject:** Request for Additional Information - PVNGS, Unit 2 License Amendment  
Request for CEA 88 (MF6678)  
**Sent Date:** 9/11/2015 4:03:33 PM  
**Received Date:** 9/11/2015 4:03:00 PM  
**From:** Watford, Margaret

**Created By:** Margaret.Watford@nrc.gov

**Recipients:**  
"Michael.Dilorenzo@aps.com" <Michael.Dilorenzo@aps.com>  
Tracking Status: None  
"Thomas.N.Weber@aps.com" <Thomas.N.Weber@aps.com>  
Tracking Status: None

**Post Office:**

<b>Files</b>	<b>Size</b>	<b>Date &amp; Time</b>
MESSAGE	1377	9/11/2015 4:03:00 PM
Request for Additional Information on PVNGS, Unit 2 Exigent LAR to Amendment SR 3.1.5.3 for CEA 88 (MF6678).pdf	102059	

**Options**  
**Priority:** Standard  
**Return Notification:** No  
**Reply Requested:** No  
**Sensitivity:** Normal  
**Expiration Date:**  
**Recipients Received:**

**REQUEST FOR ADDITIONAL INFORMATION**  
**REQUEST TO ELIMINATE MOVEMENT OF CEA 88 FROM SR 3.1.5.3**  
**FOR THE REMAINDER OF CYCLE 19**  
**PALO VERDE NUCLEAR GENERATING STATION, UNIT 2**  
**ARIZONA PUBLIC SERVICE COMPANY**  
**DOCKET NUMBER. 50-529**  
**TAC NO. MF6678**

By letter dated September 4, 2015 (Agencywide Document Access and Management System (ADAMS) Accession No. ML15247A518), Arizona Public Service Company (APS or the licensee) submitted a license amendment request to the U.S. Nuclear Regulatory Commission (NRC) to revise the Technical Specifications (TS) Surveillance Requirement (SR) 3.1.5.3 for Palo Verde Nuclear Generating Station, Unit 2. The proposed amendment would add a Note to SR 3.1.5.3, Control Element Assembly (CEA) freedom of movement surveillance, to eliminate exercising CEA 88 for the remainder of operating Cycle 19 for Unit 2, currently scheduled to end in fall 2015.

Based on the review of the amendment request, the NRC staff has determined that additional information is required regarding the exclusion of CEA 88 from SR 3.1.5.3.

**RAI 1**

The licensee's amendment request states that the proposed amendment is necessary due to a degrading upper gripper coil (UGC). The licensee further noted in Section 3.1, "Description/Justification," of the submittal that "the coil will further degrade with continued use or if energized". The amendment states that administrative controls have been put in place to only energize the UGC if necessary through the remainder of Cycle 19. Please describe in detail what administrative controls are in place to prevent energizing the UGC and causing further degradation.

**RAI 2**

The licensee's submittal states in Section 3.1 that "should an automatic CEA motion demand occur, the UGC for CEA 88 would re-energize and the CEA should move with its group". How do the administrative controls address the possible automatic CEA motion for CEA 88? What would cause an automatic motion of CEA 88 for the remainder of Cycle 19?

**RAI 3**

The licensee's amendment request states in Section 3.2 that "a parametric study was conducted from 450 effective full power days (EFPD) to the end of Cycle 19 to determine the minimum SDM [shutdown margin] that would exist following a reactor trip assuming that both CEA 88 and the CEA of the highest reactivity worth fail to insert." Further, the application states

that “the calculations were based on the same models and methods as those used to perform the TS surveillances.” The NRC staff has the following questions:

1. What date does 450 EFPD corresponds to in Cycle 19 (i.e. August 27, 2015)?
2. Are the models and methods used to perform the TS surveillances and subsequently the parametric study used to determine the minimum SDM of 7.27%  $\Delta k/k$  NRC approved?