

**From:** [Gibson, Lauren](#)  
**To:** [Robert.Roehler@aps.com](mailto:Robert.Roehler@aps.com)  
**Subject:** Draft Request for Additional Information Re: License Amendment Request to eliminate the use of the term CORE ALTERATIONS (TAC Nos. ME8160, ME8161, and ME8162)  
**Date:** Tuesday, September 04, 2012 11:03:00 AM  
**Attachments:** [draft RAI.docx](#)

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Rob,

By a letter dated March 8, 2012, Arizona Public Service Co. (APS, the licensee) submitted a license amendment (LAR) for Palo Verde Nuclear Generating Station (Agencywide Documents Access and Management System (ADAMS) Accession No. ML12076A045). The proposed amendment would eliminate the use of the term CORE ALTERATION from the technical specifications.

The U.S. Nuclear Regulatory Commission (NRC) staff has reviewed the information provided by the licensee and determined that the additional information identified in the attachment is needed in order for the NRC staff to complete its review.

Please contact me if you would like to have a clarifying conference call.

Thank you,

Lauren

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DRAFT REQUEST FOR ADDITIONAL INFORMATION  
LICENSE AMENDMENT REQUEST  
TO ELIMINATE THE USE OF THE TERM CORE ALTERATION  
IN THE TECHNICAL SPECIFICATIONS  
ARIZONA PUBLIC SERVICE, ET AL  
PALO VERDE NUCLEAR GENERATING STATION  
DOCKET NUMBERS 50-528, 50-529, AND 50-530

By a letter dated March 8, 2012 (Agencywide Document Access and Management System (ADAMS) Accession No. ML12076A045), Arizona Public Service Co. (APS, the licensee) submitted a license amendment (LAR) for Palo Verde Nuclear Generating Station. The proposed amendment would eliminate the use of the term CORE ALTERATION in the Technical Specifications.

The NRC staff has reviewed the submitted information and determined that the information below is needed for the staff to complete its evaluation.

1. The proposed REQUIRED ACTION A.1 of TS 3.9.2 states that with one SRM inoperable, the operator is required to suspend positive reactivity additions. This REQUIRED ACTION is inconsistent with guidance in TS 3.9.2 of NUREG-1432, Combustion Engineering Standard Technical Specifications. For Condition A of TS 3.9.2 of NUREG-1432 (Rev 4), the REQUIRED ACTION states that if one required SRM is inoperable, the operators are required to suspend: (A.1) positive reactivity additions, and (A.2) introduction of coolant into the RCS with boron concentration less than required to meet the minimum boron concentration of LCO 3.9.1 must be suspended immediately.

The proposed TS 3.9.2 does not adopt REQUIRED ACTION A.2 stated above. Suspending introduction of coolant inventory from sources that have a boron concentration less than that what would be required in the RCS for minimum refueling boron concentration could prevent the boron dilution event from occurring.

Address the acceptability of the proposed TS 3.9.2 without inclusion of the REQUIRED ACTION A.2 specified in STS 3.9.2 of NUREG-1432 (Rev. 4). In particular, please explain what is captured by “suspend positive reactivity additions” for Palo Verde.