



Palo Verde Nuclear  
Generating Station

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**10 CFR 50.90**

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102-04872-CDM/TNW/RAB  
December 10, 2002

U. S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Mail Station P1-37  
Washington, DC 20555

- Reference: 1. Letter, Dated June 14, 2002 from J. N. Donohew, USNRC, to G. R. Overbeck, "Palo Verde Nuclear Generating Station, Unit 2 – Request For Additional Information Regarding Power Uprate License Amendment Request (TAC No. MB3696)"
2. Letter No. 102-04847- CDM/TNW/RAB, dated October 11, 2002, from C. D. Mauldin, APS, to U. S. Nuclear Regulatory Commission, "Response to Request for Additional Information Regarding Steam Generator Replacement and Power Uprate License Amendment Request"

Dear Sirs:

**Subject: Palo Verde Nuclear Generating Station (PVNGS)  
Unit 2, Docket No. STN 50-529  
Supplement to a Response to NRC Request for Additional  
Information**

Reference 2 provided responses to questions from the NRC Reactor Systems Branch provided in Reference 1. After reviewing the responses, the Reactor System Branch Staff requested, during a phone call on November 26, 2002, that APS clarify the response to question 31.d. The Staff questioned if the response described the process or an example of a process being used to assure that LOCA analysis input values for peak cladding temperature-sensitive parameters bound the as-operated plant values for those parameters. APS stated that it was an example of a process being used.

Attachment 2 provides a revision to the response that was provided to question 31.d in Reference 2.

No commitments are being made to the NRC in this letter.

ADD 1

A member of the **STARS** (Strategic Teaming and Resource Sharing) Alliance

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Should you have any questions, please contact Thomas N. Weber at (623) 393-5764.

Sincerely,



CDM/TNW/RAB/

Attachments:

1. Notarized Affidavit
2. Revised Response to Question 31.d from Reactor Systems Branch

cc: E. W. Merschoff (NRC Region IV)  
J. N. Donohew (NRC Project Manager)  
B. Pham (NRC Project Manager)  
N. L. Salgado NRC Resident Inspector)  
A. V. Godwin (ARRA)

**Attachment 1**  
**Notarized Affidavit**

STATE OF ARIZONA        )  
  ) ss.  
COUNTY OF MARICOPA    )

I, David Mauldin, represent that I am Vice President Nuclear Engineering and Support, Arizona Public Service Company (APS), that the foregoing document has been signed by me on behalf of APS with full authority to do so, and that to the best of my knowledge and belief, the statements made therein are true and correct.

David Mauldin  
David Mauldin

Sworn To Before Me This 11<sup>th</sup> Day Of December, 2002.



Karen D. Greiner  
Notary Public

August 28, 2004  
Notary Commission Stamp

**Attachment 2**

**Revised Response to Question 31.d from the Reactor  
Systems Branch**

## Reactor Systems Branch

### NRC Question 31.d:

Provide a comprehensive statement that Palo Verde and its vendor have ongoing processes that assure that LOCA analysis input values for peak cladding temperature-sensitive parameters bound the as-operated plant values for those parameters, and briefly discuss these processes. (Do not use specific procedures and process components as examples in your response.)

### APS Revised Response:

APS and Westinghouse Electric Company, LLC. have ongoing processes that assure that LOCA analysis input values for peak cladding temperature-sensitive parameters bound the as-operated plant values for those parameters.

For example, APS and Westinghouse use an ECCS performance analysis checklist to provide the assurance that the analysis of record (AOR) bounds the plant configuration parameters prior to every reload cycle. This checklist tabulates the configuration value (i.e., the as-operated plant value) and the value supported by analysis (i.e., the LOCA analysis input value) for all peak cladding temperature-sensitive parameters. Additionally, the checklist identifies the relationship (i.e., the rule) between the configuration value and the value supported by analysis that must be obeyed in order for the ECCS performance analysis to be applicable to the new reload cycle. APS is responsible for the configuration values while Westinghouse is responsible for the values supported by analysis and defining the rules. Prior to every reload cycle, APS confirms that all the configuration values for the upcoming cycle obey their rules for the current values supported by the analyses. In general, if a configuration value is changed due to plant design or the new core design changes and does not obey its rule, Westinghouse revises the ECCS performance analysis, as appropriate, so that the rule is obeyed given the new configuration value. As part of the process, Westinghouse updates the impacted value(s) supported by analysis in the checklist to reflect the new value(s).

### References for Question 31:

1. Letter 102-03578-WLS/AKK/GAM, W.L. Stewart (APS) to Document Control Desk (NRC), "Palo Verde Nuclear Generating Station (PVNGS) Units 1, 2, and 3, Docket Nos. STN-50-528/529/530, Proposed Amendments to Facility Operating Licenses and to Technical Specifications and Various Bases, Related to Power Uprate," January 5, 1996.
2. Letter, C.R. Thomas (NRC) to W.L. Stewart (APS), "Issuance of Amendments for the Palo Verde Nuclear Generating Station Unit No. 1 (TAC No. M94541), Unit No. 2 (TAC No. M94542, and Unit No. 3 (TAC No. M94543)," May 23, 1996.
3. NUREG-1462, Vol. 1, "Final Safety Evaluation Report Related to the Certification of the System 80+ Design Docket No. 52-002," August 1994.

4. Letter, S.A. Bauer (APS) to Document Control Desk (NRC), "Palo Verde Nuclear Generating Station (PVNGS) Units 1, 2, and 3, Docket Nos. STN 50-528/529/530, Error in Energy Redistribution Factors Used in LOCA/ECCS Performance Evaluation Models, 30 Day 10CFR50.46 Report," September 14, 1997.