May 1, 2006

MEMORANDUM TO: David Terao, Branch Chief

Plant Licensing Branch IV

Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

FROM: Mel B. Fields, Senior Project Manager

/RA/

Plant Licensing Branch IV

Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

SUBJECT: FORTHCOMING MEETING WITH ARIZONA PUBLIC SERVICE

COMPANY REGARDING PALO VERDE NUCLEAR GENERATING STATION, UNIT 1 SHUTDOWN COOLING LINE VIBRATION ISSUE

DATE & TIME: Thursday, May 11, 2006

8:00 a.m. - 12:00 noon

LOCATION: U.S. Nuclear Regulatory Commission (NRC)

Two White Flint North

11555 Rockville Pike, Room O 3 B-4

Rockville, Maryland 20852

PURPOSE: To discuss the higher-than-normal vibration levels observed in the

Train A shutdown cooling line and valve SI-651, and Arizona Public Service Company's plans for resolving this issue (see attached agenda).

CATEGORY: * This is a Category 1 Meeting. The public is invited to observe this

meeting and will have one or more opportunities to communicate with the NRC after the business portion, but before the meeting is adjourned.

PARTICIPANTS: Participants from the NRC include members of the Office of Nuclear

Reactor Regulation.

NRC Arizona Public Service Company

K. Manoly
D. Terao
Carl Churchman
Scott Bauer
M. Fields, et al.
Mo Karbassian
Winston Borrero

Jeff Brown

Docket No. STN 50-528

Enclosure: Agenda

cc w/encl: See next page

MEETING CONTACT: Mel B. Fields, NRR

301-415-3062 mbf1@nrc.gov

^{*} Commission's Policy Statement on "Enhancing Public Participation in NRC Meetings," (67 FR 36920), May 28, 2002

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Arizona Public Service Company **NRC**

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Accession Number: ML061160141		NRC-001	
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DATE	5/1/06	5/1/06	5/1/06

^{*} Commission's Policy Statement on "Enhancing Public Participation in NRC Meetings." (67 FR 36920), May 28, 2002

AGENDA

MEETING WITH ARIZONA PUBLIC SERVICE COMPANY SHUTDOWN COOLING LINE VIBRATION ISSUE PALO VERDE NUCLEAR GENERATING STATION, UNIT 1

MAY 11, 2006

Background

During power ascension of Palo Verde Nuclear Generating Station (Palo Verde), Unit 1 in December 2005 following a refueling outage in which the steam generators were replaced, the vibration level of the Train A shutdown cooling (SDC) line and valve SI-651 was found to reach approximately two inches per second (ips) at approximately 32% rated thermal power. In order to prevent exceeding the SDC line vibration administrative limit of 2.0 ips and design limit of 2.25 ips, power ascension was stopped. Since that time, Unit 1 reactor power was limited to keep the SDC line vibration within the administrative limit. The SDC line vibration is hypothesized by Arizona Public Service Company to be the result of a flow-induced excitation of the fundamental acoustic frequency of the SDC suction line. The system is believed to be excited by a pressure disturbance originating at the suction line nozzle resulting from a coupled interaction between instabilities within the flow shear layer over the nozzle and the refracted standing wave in the line. Palo Verde is currently defueled and undergoing repair activities to correct the vibration problem.

Introductions 8:00 a.m.

History of SI-651 Vibration Issue

Proposed Modifications

Final Corrective Action

Closing Remarks

Public Comment/Questions

Adjourn 12:00 noon

CC:

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Palo Verde Generating Station, Unit 1

CC:

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