Arizona Public Service Company
P.O. BOX 53999 • PHOENIX, ARIZONA 85072-3999

212-01087-WFC/RJS/ACR
November 6, 1992

WILLIAM F. CONWAY
EXECUTIVE VICE PRESIDENT
NUCLEAR

CONFIDENTIAL

Mr. John B. Martin
Regional Administrator, Region V
U. S. Nuclear Regulatory Commission
1450 Maria Lane, Suite 210
Walnut Creek, California 94596-5368

Reference: Letter dated September 29, 1992, from K. E. Perkins, Jr., USNRC Region V, to W. F. Conway, APS

Dear Mr. Martin:

Subject: Palo Verde Nuclear Generating Station (PVNGS)
Units 1, 2, and 3
Docket Nos. STN 50-528/529/530
Reply to NRC Request for Information
File: 92-070-026; 92-056-026

The referenced letter requested that Arizona Public Service Company (APS) review information NRC received about employee concerns at PVNGS and provide a response. Six enclosures were included with the referenced letter, with a separate issue discussed in each enclosure. APS' response is provided in the attachment to this letter.

APS has determined that none of the allegations contained in five of the six enclosures could be substantiated. In some cases a portion of the alleged facts was found to be correct, but no safety significant matters were identified. Additional time is required to complete the investigation of the remaining enclosure, Enclosure 4. The response to Enclosure 4 provides a current status of the investigation. A complete response to Enclosure 4 will be provided by November 23, 1992.

Because the responses to these issues contain personal information, the disclosure of which would be an unwarranted invasion of personal privacy, APS requests that the information in this letter and its attachment be considered confidential and withheld from public disclosure pursuant to 10 CFR § 2.790(a)(6) and 10 CFR § 9.17(a)(6).

A-1

212-01087-WFC/RJS/ACR
November 6, 1992

The due date for this response was extended from October 29, 1992, to November 6, 1992, by telephone conference on October 28, 1992, between Howard Wong of the NRC, and T. R. Bradish of APS. If you have any questions regarding this letter, please contact Mr. Carter Rogers at (602) 340-4041.

Sincerely,

E C Simpson for
W F Conway

WFC/RJS/ACR/dmn
Attachment - Reply to NRC Request for Information

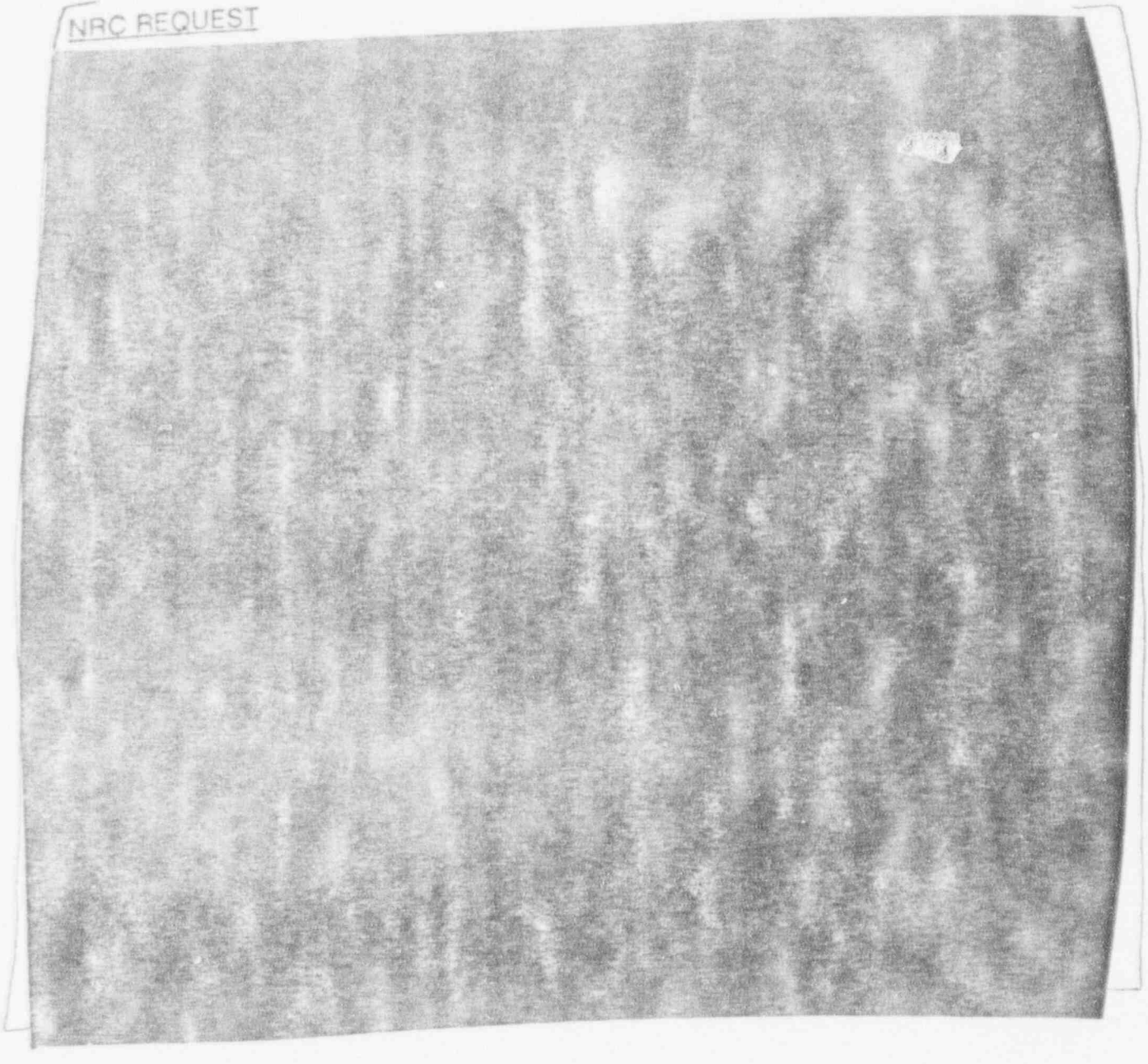
cc: J. A. Sloan
A. C. Gehr
A. H. Gutterman
NRC Document Control Desk

ATTACHMENT

APS RESPONSE TO NRC REQUEST FOR INFORMATION
DATED SEPTEMBER 29, 1992

RESPONSE TO ENCLOSURE 1

NRC REQUEST



RESPONSE TO ENCLOSURE 2

NRC REQUEST

Arizona Public Service Company (APS) had not resolved a repetitive problem with a fire protection circuit. The circuit which was possibly related to damper control or alarm functions to the Unit 2 control room, would open due to overloading of a fuse. System engineers were not too concerned about the problem and were going to ignore it.

[redacted], a contract I&C technician, had worked on the fire protection circuit in December 1991 and had informed APS management [redacted] and other APS employees [redacted] and others) of the problem.

NRC Request: As part of the response to this concern, APS is also requested to provide a list of work order numbers for work performed by [redacted] in December 1991, along with the numbers of any CRDRs, nonconformance reports, or assessments initiated as a result of [redacted] work or as a result of comments made by [redacted]

APS RESPONSE

Because the information provided in Enclosure 2 does not clearly identify a specific problem, APS could not immediately identify the condition of concern. As a result, an investigation was initiated to identify the problem or any similar condition.

First, [redacted] December 1991 time billing records were reviewed to determine all work orders that [redacted] worked on related to the fire protection system. These fire protection work orders were then reviewed to determine whether [redacted] or anyone else, identified a condition similar to the one described above. No such conditions were identified.

Second, [redacted] was interviewed about the allegation and was asked if [redacted] had ever described a problem similar to the one in Enclosure 2. [redacted] replied that [redacted] had not. [redacted] did not work on the two work orders identified in [redacted] December time records.

Third, the Unit 2 outage I&C foremen of [redacted] shift (i.e. [redacted] and [redacted] were interviewed. The Unit 2 I&C foremen stated that [redacted] had never identified any problem to either of them that was similar to the one described in Enclosure 2. The two foremen also reviewed the two December work orders that [redacted] worked on and stated they were not aware of any problems involving dampers or blown fuses in the circuitry associated with the work orders.

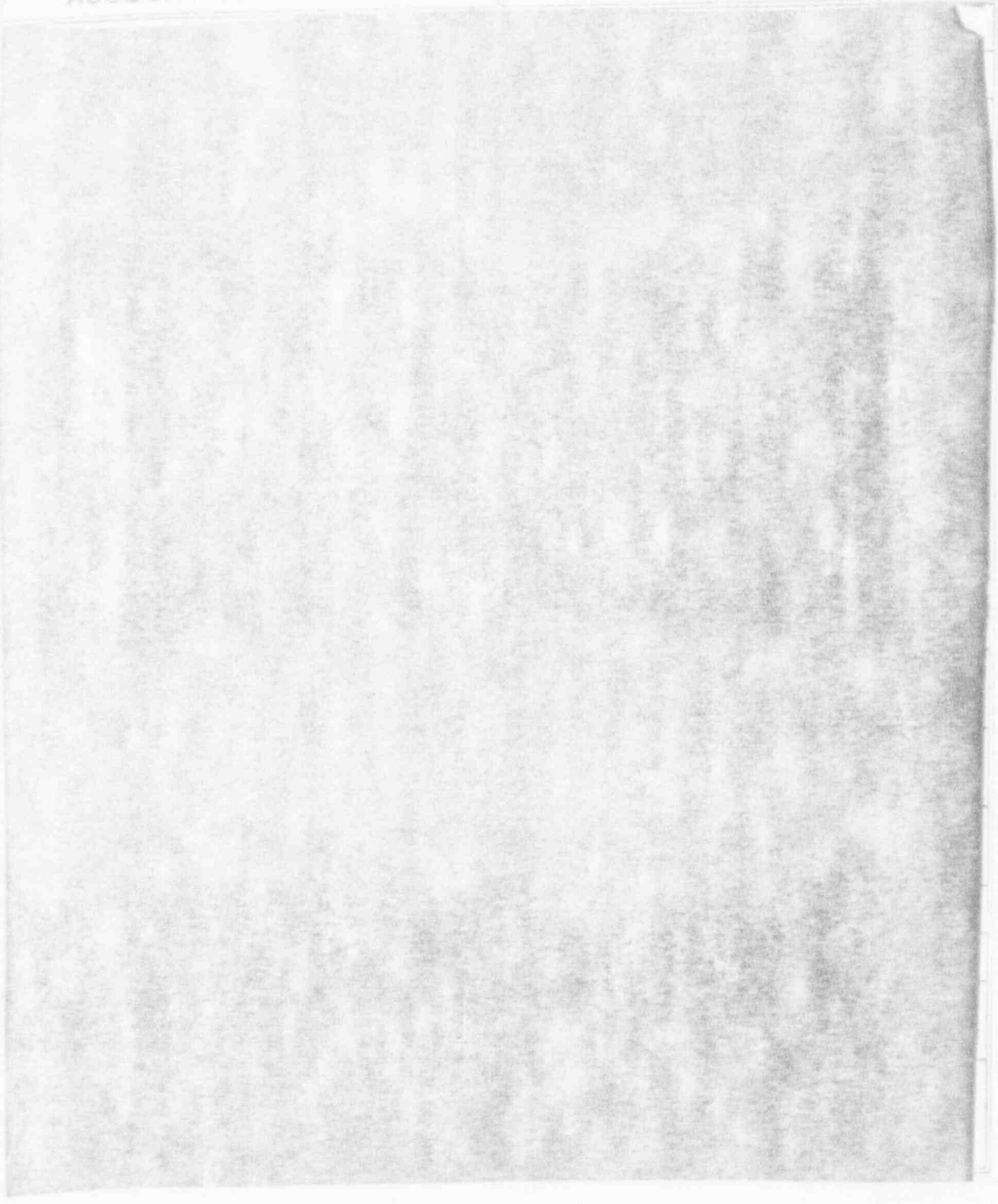
Fourth, Condition Reports/Disposition Requests (CRDRs) and Material Non-conformance Reports (MNCRs) were reviewed to determine if [redacted] had identified or reported any condition similar to that described in Enclosure 2. [redacted] did not initiate any CRDRs or MNCRs during December 1991.

Finally, the Plant Engineer responsible for fire protection systems was interviewed. The Plant Engineer stated that he had no knowledge of [redacted] and does not believe that [redacted] brought any plant problem to him. Additionally, the only problem even resembling the problem described in Enclosure 2 was identified by an APS technician and the Plant Engineer himself in early 1992. This problem does involve the fire protection dampers and fuses in the carbon dioxide subsystems. A detailed evaluation of the problem is underway and possible corrective action is being planned as part of a Plant Change Request (PCR) package (PCR No. 92-13-FP) presently being processed by PVNGS. This PCR was initiated June 12, 1992.

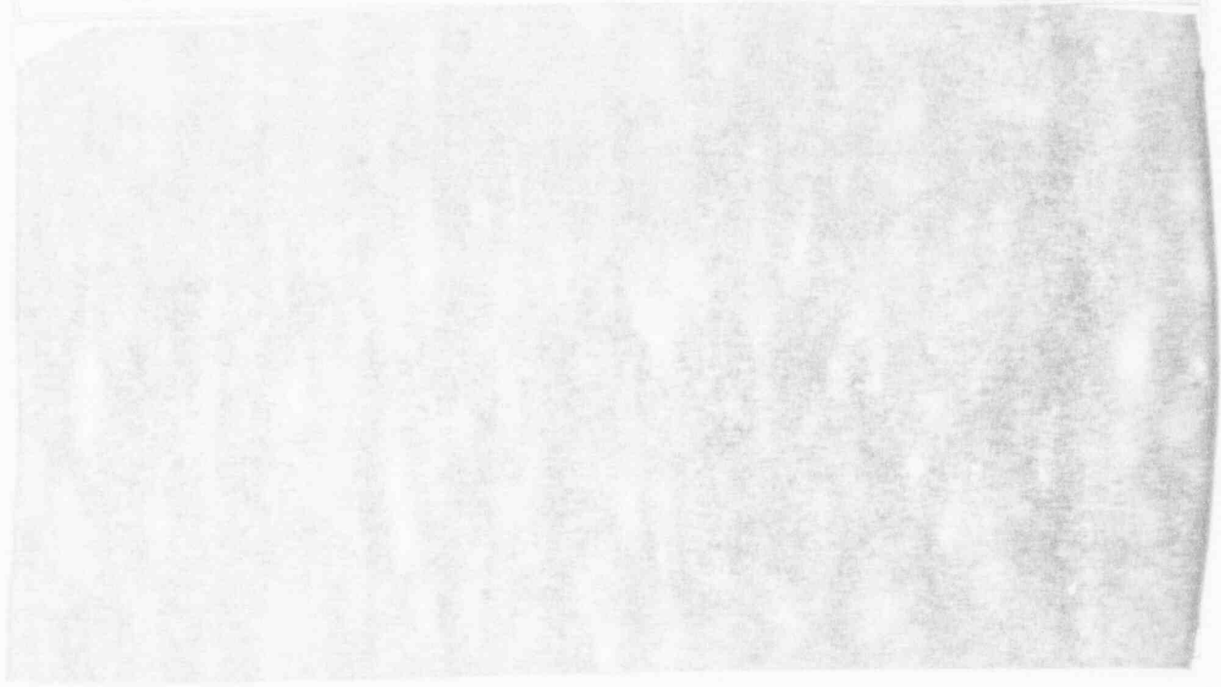
In conclusion, neither the problem described in Enclosure 2 nor any similar problem was reported to APS by [redacted]

In response to the NRC's specific request, the work order numbers for work performed by [redacted] in December 1991, taken from time records completed by [redacted] are listed below. As already noted, the search of PVNGS records for December 1991 for CRDRs and MNCRs did not identify any initiated by [redacted]

ACCOUNT NO./WORK ORDER	WEEK ENDING DATE



ACCOUNT NO./WORK ORDER	WEEK ENDING DATE



RESPONSE TO ENCLOSURE 3

NRC REQUEST

The annual performance of supervisors at Palo Verde was measured in part by the number of Condition Report/Disposition Requests (CRDRs) issued against his/her department. In 1991 and 1992, it was expected that no more than three CRDRs were to be issued against the department. This performance system discourages employees from initiating CRDRs.

APS RESPONSE

The APS performance appraisal system for PVNGS places responsibility and discretion in line management to establish performance targets, measures or goals for employees. Performance targets for supervisors are established by their direct line superiors, which at APS are titled Managers. A review of the completed annual performance appraisals for PVNGS supervisors for 1991 and 1992 to date revealed no performance targets that utilized the quantity of CRDRs issued against the department as a measure of a supervisor's performance.

An example target found in PVNGS supervisors' appraisals is:

> EXCELLENCE: Minimizes errors, meets regulatory commitments. Performs quality work, implements new ways to improve efficiency, maintains individual and staff morale, and supports work rules.

In a few instances, a PVNGS Manager described a supervisor's achievement (or non-achievement) of excellence in terms of the number of CRDRs that had been issued against the supervisor's section during the appraisal period. While APS approves and supports its managers' promotion of excellence, APS is sensitive to the idea that performance measures could discourage problem identification. As a result, APS will be informing its PVNGS managers and supervisors as part of performance appraisal education, that promotion of excellence, as it relates to or is expressed in CRDRs, should be done by concentrating on the performance or error that led to the CRDR, rather than concentrating on the number of CRDRs written against the section or department. These steps are designed to balance the promotion of excellence with the encouragement of problem identification.

The allegation contained in Enclosure 3 was not substantiated. There were no performance targets or expectations that "no more than three CRDRs" be issued against any department. Notwithstanding the absence of substantiation, APS is taking steps to avoid the possibility of any misunderstanding that would discourage employees or supervisors from identifying problems while at the same time continuing to encourage excellence.

RESPONSE TO ENCLOSURE 4

NRC REQUEST

A [redacted] had exceeded [redacted] overtime limits and did not report all [redacted] time on the time cards. A review of ACAD access records would reveal a mismatch.

APS RESPONSE

The Plant Engineering Section of the Site Technical Support Division [redacted] work group) uses time tickets to determine the hours worked by employees. A time clock is not used, nor are ACAD records reviewed to determine hours worked. Many Plant Engineering personnel have work activities both inside and outside the Protected Area. ACAD transaction records would not indicate periods of work outside the Protected Area; also, the ACAD transaction records would not indicate periods inside the Protected Area that were spent taking lunch breaks or performing shift turnover. Therefore, ACAD records are not used to document compliance with PVNGS overtime limitations.

Because the allegation in Enclosure 4 indicated that [redacted] time records and ACAD records did not accurately reflect [redacted] overtime, APS reviewed [redacted] ACAD transaction records and time ticket submittals (Payroll Time Cards). The review period selected was from September 22, 1991, to January 22, 1992. These records were selected because the period began several weeks before the Unit 2 third refueling outage and ended several weeks after the completion of that outage. Due to the routine use of overtime during a refueling outage, this period provides a good basis for determining if overtime limitations were exceeded by [redacted]

A review of [redacted] ACAD records and [redacted] time tickets indicated more hours on the ACAD records than on the time tickets. When asked to explain this difference [redacted] stated that the ACAD records included time spent for lunch periods, work breaks, and other miscellaneous time, such as travel to and from the work place and discussions with coworkers, all which [redacted] did not consider recordable work activities. [redacted] time tickets, therefore, would not reflect those non-work activities.

After initial review, APS has preliminarily concluded that [redacted] has adequately explained the difference between [redacted] ACAD records and his time tickets. As explained above, ACAD records are not used to determine overtime limitation compliance. To date, APS' review has concluded that [redacted] did work more than 12 consecutive days in violation of PVNGS procedure 02AC-0EM01, "Overtime Limitations," which places a limit on scheduled consecutive work days. In order to determine whether [redacted] complied with other PVNGS overtime limits, APS must evaluate whether the time excluded by [redacted] is consistent with management's expectations and the intent of the PVNGS overtime limitation procedure. APS' review and evaluation will be completed by November 23, 1992, and the results will be provided to the NRC in a supplemental response. Appropriate corrective measures are being evaluated and will be discussed in APS' supplemental response.

RESPONSE TO ENCLOSURE 5

NRC REQUEST

The steam line supplying AFP-P01, the turbine driven auxiliary feedwater pump, has a small amount of steam flow to keep the turbine warm to prevent overspeed. As a result, the steam line should be reclassified as a high energy line rather than a passive line.

Note: Region V understands this steam line is not classified as a high energy line in the Palo Verde FSAR; however, Region V has learned that Palo Verde operates with the isolation valves for the steam line slightly open and this practice might affect the classification of the line.

APS RESPONSE

Palo Verde operates with valves SG-UV-134 and 138 in the fully closed position (torque seated MOVs), but allows a small amount of leakage (normal seat leakage due to wear) to warm the steam supply lines for the Auxiliary Feedwater Pump Turbine for the Palo Verde Units. The temperature of the steam is approximately 212F and the pressure is essentially atmospheric. The temperature of the line is monitored to be within 190F to 212F. Since there is little stored energy in the line, the Auxiliary Feedwater Pump steam supply line does not meet the Branch Technical Position APCSB 3-1 and MEB 3-1 definition of a high energy steam line.

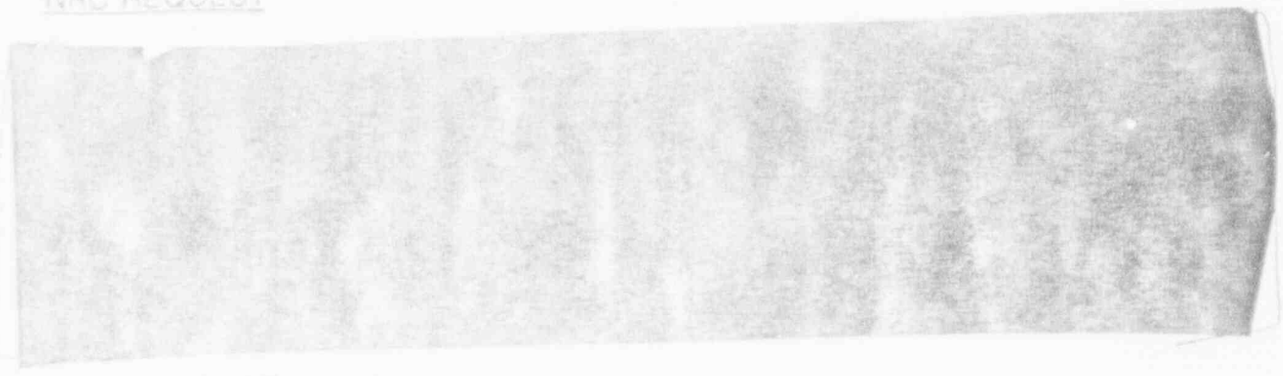
The design and classification of these steam lines have been evaluated by APS and reviewed by the NRC on several occasions. In each case, these evaluations have confirmed that during normal plant conditions, the Auxiliary Feedwater Pump steam supply lines are not in operation and are not pressurized. The only time these steam lines are pressurized is when the steam driven Auxiliary Feedwater Pumps are in operation, a condition that occurs less that 2% of the plant operating time. On that basis, the NRC has accepted the PVNGS design relative to the Branch Technical Positions. This acceptance is documented in Section 10.4.9.2.C of the PVNGS Safety Evaluation Report.

The classification of the steam supply line was raised, with the NRC present, in the Independent Design Review held in Phoenix on August 21 and 22, 1980. The transcript of this meeting is on the Palo Verde docket. More recently, the classification of the steam line was raised during a telephone conversation with NRR regarding EER 90-SG-172 in September 1990 and again in a discussion with Region V as noted in Inspection Report 50-528/91-31. Consistently, Palo Verde has taken the position that the steam supply lines from valves SG-UV-134, 134A, 138 and 138A to the Auxiliary Feedwater Pumps are not high energy lines.

The amount of grease in motor operated valve operators is regularly checked during preventative maintenance inspections. The procedure, 39MT-9ZZ02, "PM/EQPM Inspection of the GL 89-10 Limitorque SMB/SB Valve Motor Operators," requires inspection of both the quantity, quality, and consistency of the grease in the Main Housing Cavity. If the amount of grease is not proper, additional grease must be added. This program has not identified a significant problem with grease levels in motor operated valves.

RESPONSE TO ENCLOSURE 6

NRC REQUEST



APS RESPONSE

APS has a systematic process for reviewing completed work orders for NPRDS reportable items. A lack of grease in a MOV would not be reported in NPRDS, pursuant to INPO guidelines, unless there is a failure associated with the lack of grease. Lack of grease alone is considered an incipient failure, which is not reported in NPRDS. While PVNGS does have work orders that exceed INPO time guidelines, these work orders are being reviewed for NPRDS reportability, and items are being reported as appropriate upon identification.

During an interview to determine the occurrences of MOVs lacking grease, the APS Valve Services Engineer could only recall two incidents of lack of grease in safety related valves. In the first event, rotation had thrown the excess grease from the motor operator pinion gears though a thin film remained. The condition was evaluated in IIR/ORDR 9-1-0064. While grease was added to the motor operator to correct the condition, the motor operator supplier confirmed that a thin film was all that was required to properly lubricate the pinion gears, thus the valve was not inoperable. The second event occurred when, during a Preventative Maintenance (PM) inspection, a motor operator was found to require the addition of a large amount of grease. The valve was tested after the addition of the grease and found to operate satisfactorily.