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June 8, 2000

U. S. Nuclear Regulatory Commission
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Dear Sirs:

Reference: APS letter no. 094-01319-EEL/LL, from C. K. Seaman to U.S. Nuclear Regulatory Commission, dated April 11, 2000, subject: transmittal of revised PVNGS Emergency Plan Implementing Procedures (EPIP).

Subject: Palo Verde Nuclear Generating Station (PVNGS)
Units 1, 2, and 3
Docket Nos. STN 50-528/529/530
Emergency Plan Implementing Procedure Update

Attached are the updates to the PVNGS Emergency Plan Implementing Procedures. This update is being submitted to supplement a previous submittal (Reference) which was discovered to be missing two pages.

Specifically, the referenced submittal did not include page 212 of 433 of EPIP-02 or page 355 of 446 of EPIP-04. This omission was the result of an administrative error. The missing pages are contained in the enclosure to this letter and can be inserted in the previously provided Emergency Plan Implementing Procedures without additional modification. APS apologizes for any inconvenience this omission may have caused.

In accordance with 10 CFR 50.4(b)(5)(iii), two copies of this update are being forwarded to the Regional Administrator, Region IV, and one copy is being provided to the PVNGS Senior Resident Inspector. The implementation date of this update was March 31, 2000 for EPIP-04 and April 6, 2000 for EPIP-02.

If you have questions regarding this submittal, please contact me at (623) 393-2099.

Sincerely,

Craig K. Seaman
Director
Emergency Services

NRR-037

A045

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Enclosure

cc: E. W. Merschoff (w/Enclosure - 2 copies)
M. B. Fields (w/o Enclosure)
J. H. Moorman (w/Enclosure)

ENCLOSURE

PVNGS EMERGENCY PLAN IMPLEMENTING PROCEDURES

| <u>TITLE</u> | <u>NUMBER</u> | <u>REVISION</u> | <u>PAGE NUMBER</u> |
|--|----------------------|------------------------|---------------------------|
| Operations Support Center Actions | EPIP-02 | 17 | 212 of 433 |
| Emergency Operations Facility Actions | EPIP-04 | 23 | 355 of 446 |

OPERATIONS SUPPORT CENTER ACTIONS

EP-02

Revision
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5.7.2.4 Calculate the total Iodine concentration by summing the isotopic concentrations.

5.7.2.5 Proceed to section 6.0, Sample Analysis Follow-up.

5.7.3 If dose rates are less than or equal to 0.8 REM / hour, perform the following actions:

5.7.3.1 Using six 1-inch attenuator blocks initially, carefully and quickly place the sample filter head assembly in the lead shield in the sample holder rack at the highest elevation centered directly over the appropriate attenuator block. Remove blocks as necessary.

5.7.3.2 Perform sample analysis in accordance with 74CH-9XC50, Operation and Calibration of the Gamma Spectrometry System. Multiply the sample volume by 0.04 Iodine plate-out correction factor.

5.7.3.3 Remove the sample from the lead shield quickly and carefully using tongs and place the sample in a lead cask / pig.

5.7.3.4 Proceed to section 6.0, Sample Analysis Follow-up.

6.0 Sample analysis follow-up

6.1 Control of Analyzed Samples

NOTE

Form EP-0514, Containment Radiochemistry CDA (Parts 1-11 - see Appendix C - Forms) can be used to facilitate transmittal of data to the Technical Support Center.

6.2 Report analytical results to the Chemistry Coordinator upon completion of sample analysis.

EMERGENCY OPERATIONS FACILITY ACTIONS

EPIP-04

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1.5.63 3-17 (page 6 of 7)

TECHNICAL BASIS (continued...):

A "depleted c/Q" could be used for the Iodine isotopes; the resulting reduction in external EDE would be small.

In MESOREM Jr. Mode-A dose projections, CEDE is from inhalation only and external EDE is from immersion only; that is, CEDE from ingestion is calculated only in Mode-B, and external EDE from deposition is used only in PAG calculations and not EAL calculations. Particulate source term is also reserved for Mode-B projections. Therefore, for purposes of Initial Phase EALs:

$$\text{TEDE} = \text{CEDE}_{\text{inhalation}} + \text{External EDE}$$

$$= 1.5\text{E-}01 + 4.7\text{E-}01$$

$$= 6.2\text{E-}01 \text{ rem/hour}$$

Conclusion 1:

Based on a Plant Vent concentration (noble gas) of 2.2 $\mu\text{Ci/cc}$ or a Fuel Building Vent concentration of 19.6 $\mu\text{Ci/cc}$, the TEDE PAG is not reached for the postulated accident type.

The thyroid CDE will now be calculated for a Plant Vent concentration (noble gas) of 2.2 $\mu\text{Ci/cc}$ to show whether this proposed EAL value reaches or exceeds the thyroid CDE PAG.

$$\text{CDE} = \hat{A}_{I=1 \text{ to } n} (\text{DCF})_i (\text{c/Q}) (\text{Release Rate})_i (\text{Unit Conversion})$$

where:

DCF_i = Dose Conversion Factor from EPA-400, Tables 5-2 and 5-4, for nuclide "i", in rem-cc per $\mu\text{Ci-hour}$

$\text{c/Q} = 8.91\text{E-}06 \text{ seconds/meter}^3$, as discussed previously

$(\text{Release Rate})_i$ is as calculated above, in Ci/second

$(\text{Unit Conversion}) = 1 \mu\text{Ci/cc per Ci/m}^3$

| Nuclide | DCF_i | c/Q | Release Rate | Thyroid CDE_i |
|---------|----------------|--------------|--------------|------------------------|
| I-131 | 1.3E+06 | 8.91E-06 | 3.0E-01 | 3.5E+00 |
| I-132 | 7.7E+03 | 8.91E-06 | 3.0E-01 | 2.0E-02 |
| I-133 | 2.2E+05 | 8.91E-06 | 6.1E-01 | 1.2E+00 |
| I-134 | 1.3E+03 | 8.91E-06 | 6.6E-01 | 7.6E-03 |
| I-135 | 3.8E+04 | 8.91E-06 | 5.6E-01 | <u>1.9E-01</u> |

Thyroid CDE = 4.9 rem/hour