

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

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 FACIL:STN-50-529 Palo Verde Nuclear Station, Unit 2, Arizona Publi 05000529
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 RECIP.NAME RECIPIENT AFFILIATION
 KNIGHTON,G.W. PWR Project Directorate 7

SUBJECT: Responds to 851127 request for info & justifications for
 interim operation re radiation monitors for plant, per
 NUREG-0737, Suppl I. Measures taken re factors contributing to
 inoperable radiation monitors listed.

DISTRIBUTION CODE: B001D COPIES RECEIVED: LTR 1 ENCL 1 SIZE: 6
 TITLE: Licensing Submittal: PSAR/FSAR Amdts & Related Correspondence

NOTES: Standardized plant.

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	RECIPIENT ID CODE/NAME	COPIES LTR ENCL	RECIPIENT ID CODE/NAME	COPIES LTR ENCL
	PWR-B ADTS	1 0	PWR-B PD7 PD	1 0
	PWR-B PD7 LA.	1 0	LICITRA,E 01	1 1
INTERNAL:	ACRS 41	6 6	ADM/LFMB	1 0
	ELD/HDS3	1 0	IE FILE	1 1
	IE/DEPER/EPB 36	1 1	IE/DQAVT/QAB21	1 1
	NRR BWR ADTS	1 1	NRR PWR-A ADTS	1 1
	NRR PWR-B ADTS	1 1	NRR ROE,M,LI	1 1
	NRR/DHFT/HFIB	1 1	NRR/DHFT/MTB	1 1
	NRR/DHFT/TSCB	1 1	NRR/DSRO DIR	1 1
	NRR/DSRO/RRAB	1 1	REG FILE 04	1 1
	RGNS	3 3	RM/DDAMI/MIB	1 0
EXTERNAL:	24X	1 1	BNL(AMDTS ONLY)	1 1
	DMB/DSS (AMDTS)	1 1	LPDR 03	1 1
	NRC PDR 02	1 1	NSIC 05	1 1
	PNL GRUEL,R	1 1		



Arizona Nuclear Power Project

P.O. BOX 52034 • PHOENIX, ARIZONA 85072-2034

November 29, 1985
ANPP 34129 EEVB/WFQ/JKO

Director of Nuclear Reactor Regulation
Attention: Mr. George W. Knighton, Project Director
PWR Project Directorate #7
Division of Pressurized Water Reactor Licensing - B
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555

Subject: Palo Verde Nuclear Generating Station (PVNGS)
Unit 2
Docket No. STN 50-529
Justification for Interim Operation related to
the Radiation Monitors
File: 85-056-026; G.1.01.10

Reference: Letter to G. W. Knighton, NRC, from E. E. Van Brunt, Jr., ANPP,
dated November 8, 1985 (ANPP-33965); Subject: Supplement 1 to
NUREG-0737 Schedule

Dear Mr. Knighton:

Per telecon on November 27, 1985, ANPP agreed to provide information and justifications for interim operation concerning the Radiation Monitors for Unit 2.

The schedule for the Radiation Monitors is as follows: (1) Monitors which are subject to Technical Specification requirements will be operable prior to the mode for which they are required without entering a technical specification action statement; (2) Regulatory Guide 1.97 monitors will be operable per the commitments in the referenced letter; (3) Monitors which are not subject to Technical Specification requirements and are not discussed in the referenced letter will be operable as described in the attachment to this letter. The attachment to this letter also provides compensatory measures and justifications for interim operation for those monitors which will not be completed prior to initial criticality. Prior to initial criticality, there is no reactivity in the system.

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Several factors, as discussed below, have contributed to the Unit 2 radiation monitors being inoperable at this time. Measures have been taken to correct these conditions.

1. Vendor Support

Vendor support is needed in design areas primarily for Hardware Design Changes, Software Design Changes and Technical Clarification. This support from the vendor has historically been slow and, in some cases, lacked clarity. To resolve these problems, ANPP has contracted the services of two vendor engineering personnel to work strictly for this project. The overall level of support has increased and has indications of continuing to increase. In addition, the project has contracted for two technicians from the vendor on a short duration basis. This is to facilitate more rapid troubleshooting and increase the PVNGS personnel knowledge of the system.

2. Maintenance (I&C) Knowledge Level

As with all highly technical systems, it takes time for personnel to learn the system. In the 3 months of intense concentration on this particular system, the technicians have progressed significantly on the learning curve. This, of course, will continue to improve with time.

3. Spare Parts

Spare parts is an industry wide problem, not specifically associated with this system but definitely a factor. Due to the complexity of the system, most failures have to be resolved on a circuit board level. Faulty circuit boards are removed and then sent back to the factory (vendor) for repair. In June, 1985, an order to increase the spare parts inventory by approximately 50% was placed with the vendor. Due to long lead times, the bulk of this order is just beginning to become available on site. The vendor has also committed to increase production for PVNGS to approximately 50% of factory output. To date, the project has expected delivery dates ranging from the present to 6 months from now.

4. PVNGS Unit 1 Support

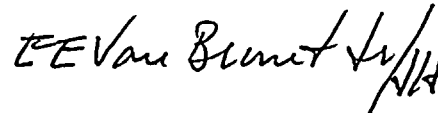
Due to commitments for Unit 1, radiation monitor parts were transferred from Unit 2 for use in Unit 1. These parts, for the most part, have been replaced in Unit 2 and, if the need arises, Unit 3 parts will be used to support Units 1 and 2. Also, the need for spare parts in Unit 1 has dropped off significantly.

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The projected completion dates discussed in the attachment are the PVNGS commitment for completion. If, for any unforeseeable reason we cannot meet this commitment, we will discuss it with the staff at that time.

If you have any further questions, please contact Mr. William F. Quinn.

Very truly yours,

A handwritten signature in dark ink, appearing to read "E. E. Van Brunt, Jr." with a stylized flourish at the end.

E. E. Van Brunt, Jr.
Executive Vice President
Project Director

EEVB/WFQ/JKO/dlm

cc: E. Licitra
M. Ley
R. P. Zimmerman
A. C. Gehr

1. The first part of the report is a general introduction to the subject of the study. It discusses the importance of the study and the objectives of the research.

2. The second part of the report is a detailed description of the methodology used in the study. It includes information about the sample size, the data collection methods, and the statistical analysis techniques.

3. The third part of the report is a discussion of the results of the study. It compares the findings with the previous research and discusses the implications of the study.

4. The fourth part of the report is a conclusion and a list of references. The conclusion summarizes the main findings of the study and the references list the sources used in the research.

ATTACHMENT

PROCESS MONITORS - LIQUID

<u>MONITOR NUMBER</u>	<u>DESCRIPTION</u>	<u>PROJECTED COMPLETION</u>
RU-4, 5	Steam Generator Blowdown Monitors	June 30, 1986

Justification for Interim Operation (JIO):

Steam Generators will be sampled every 72 hours while in Mode 1 to 4 for gamma isotopic activity. The condenser vent effluent monitors (RU-141/142) must be on line for Mode 4 entry and these will indicate in the event of contamination in the secondary system.

RU-2, 3, RU-6	Essential Cooling Water Monitors Nuclear Cooling Water Monitor	June 30, 1986
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JIO:

Prior to these monitors becoming fully operable, but only after initial criticality and when the applicable train/system is in operation, the applicable train will be sampled on a weekly basis for gamma isotopic activity. These monitors are for trend indication only and the buildup of radioactivity in these trains is slow and significant leakage would be identified via water balance inventories on affected system.

RU-7	Auxiliary Steam Condensate	Initial Criticality
RU-204	Process Radiation Monitor	Initial Criticality
RU-265	Gas Stripper Monitor	Initial Criticality

NOTE:

Samples will be taken in accordance with Station Procedures.

THE
FEDERAL BUREAU OF INVESTIGATION

WASHINGTON, D. C.

REPORT

NO. 100-100000

DATE

1964

TO THE DIRECTOR, FBI

FROM THE SAC, NEW YORK

SUBJECT: [Illegible]

RE: [Illegible]

NY 100-100000

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ATTACHMENT
(Continued)

PROCESS MONITORS - ATMOSPHERE

<u>MONITOR NUMBER</u>	<u>DESCRIPTION</u>	<u>PROJECTED COMPLETION</u>
RU-8	Auxiliary Building Ventilation Exhaust	June 30, 1986
RU-9	Auxiliary Building Lower Level Vent Exhaust	June 30, 1986
RU-10	Auxiliary Building Upper Level Vent Exhaust	June 30, 1986
RU-14	Radwaste Building Vent Exhaust	June 30, 1986

JIO:

Prior to these monitors becoming fully operable, but only after initial criticality, the associated sample stream will be monitored via a continuous air monitor (CAM). These CAM's will be of a portable type with preset alarms and recorder. These CAM's will be checked daily. The atmosphere that these monitors sample during normal operation is the exhaust through the Plant Vent which is sampled by Technical Specification Monitor RU-143. These monitors are used to localize the source of the contamination and the CAM's will provide similar indication.

RU-15	Waste Gas Vent Exhaust	June 30, 1986
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JIO:

No compensatory measures will be taken. The atmosphere that this monitor would normally sample is additionally sampled by the following Technical Specification Monitors RU-12 upstream and RU-143 downstream.

RU-34	Refueling Purge Exhaust Monitor	June 30, 1986
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JIO:

No compensatory measures will be taken. The atmosphere that this monitor would normally sample is additionally sampled by the following Technical Specification Monitors RU-1 (containment atmosphere) upstream and RU-143 (plant vent) downstream.

NOTE:

Samples will be taken in accordance with Station Procedures.

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ATTACHMENT
(Continued)

AREA RADIATION MONITORS

<u>MONITOR NUMBER</u>	<u>DESCRIPTION</u>	<u>PROJECTED COMPLETION</u>
Ru-16	Containment Operating Level Monitor	Initial Criticality
RU-17	Containment Incore Area Monitor	Initial Criticality
RU-33	Refueling Machine Area Monitor	Initial Criticality
RU-18	Control Room Area	June 30, 1986
RU-20	Solid Waste Processing	June 30, 1986
RU-21	Solid Waste Storage Area	June 30, 1986
RU-22	Loading Bay Area	June 30, 1986
RU-23	Radiochemical Lab Area	June 30, 1986
RU-25	Controlled Machine Shop Area	June 30, 1986
RU-26	Sample Room Area	June 30, 1986
RU-27	Waste Solidification Area	June 30, 1986
RU-28	Waste Solidification Area	June 30, 1986

JIO:

These areas will be monitored via Portable Area Monitors after initial criticality with preset local alarms and will be checked on a daily basis. These monitors are utilized for area radiation levels for personnel working in the area and this indication will be covered by the use of the portable area monitors.

NOTE:

Samples will be taken in accordance with Station Procedures.



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Handwritten text block, possibly a signature or a specific section of the document.

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