ACCELERATED DISTRIBUTION DEMONSTRATION SYSTEM

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR:8909190187 DOC.DATE: 89/08/31 NOTARIZED: NO DOCKET #
FACIL:STN-50-528 Palo Verde Nuclear Station, Unit 1, Arizona Publi 05000528
STN-50-529 Palo Verde Nuclear Station, Unit 2, Arizona Publi 05000529
STN-50-530 Palo Verde Nuclear Station, Unit 3, Arizona Publi 05000530
AUTH.NAME AUTHOR AFFILIATION
PORTER,K.F. Arizona Public Service Co. (formerly Arizona Nuclear Power
MARSH,W.C. Arizona Public Service Co. (formerly Arizona Nuclear Power
RECIP.NAME RECIPIENT AFFILIATION

SUBJECT: Monthly operating rept for Aug 1989 for Palo Verde Nuclear Generating Station,Units 1,2 & 3.W/890913 ltr.

DISTRIBUTION CODE: IE24D COPIES RECEIVED:LTR 1 ENCL 1 SIZE: 12
TITLE: Monthly Operating Report (per Tech Specs)

NOTES:
Standardized plant. 05000528
Standardized plant. 05000529
05000530

	RECIPIENT ID CODE/NAME	COPIES LTTR	COPIES ENCL	RECIPIENT ID CODE/NAME	COPIES LTTR	COPIES ENCL
	PD5 LA	3	3	PD5 PD	1	1
	CHAN,T	1	1	DAVIS,M.	1	1
INTERNAL:	ACRS	10	10	AEOD/DOA	1	1
	AEOD/DSP/TPAB	1	1	IRM TECH ADV	2	2
	NRR/DLPQ/PEB 10	1	1	NRR/DOEA/EAB 11	1	1
	NRR/DREP/RPB 10	1	1	NUDOCS-ABSTRACT	1	1
	REG FILE 01	1	1	RGN5	1	1
EXTERNAL:	EG&G SIMPSON,F	1	1	LPDR	1	1
	NRC PDR	1	1	NSIC	1	1

NOTES: 1 1

NOTE TO ALL "RIDS" RECIPIENTS:

PLEASE HELP US TO REDUCE WASTE! CONTACT THE DOCUMENT CONTROL DESK, ROOM P1-37 (EXT. 20079) TO ELIMINATE YOUR NAME FROM DISTRIBUTION LISTS FOR DOCUMENTS YOU DON'T NEED!

TOTAL NUMBER OF COPIES REQUIRED: LTTR 31 ENCL 31

RIDS/ADDS

RIDS/ADDS

RIDS/ADDS

Arizona Public Service Company

PALO VERDE NUCLEAR GENERATING STATION
P.O. BOX 52034 • PHOENIX, ARIZONA 85072-2034

254-00409-WCM/KFP
September 13, 1989

Docket Nos. STN 50-528/529/530

Document Control Desk
U. S. Nuclear Regulatory Commission
Mail Station P1-137
Washington, D.C. 20555

Dear Sirs:

Subject: Palo Verde Nuclear Generating Station (PVNGS)
Units 1, 2 and 3
Monthly Operating Reports for August 1989
File: 89-024-404/89-056-026

Attached are the Monthly Operating Reports for August 1989 prepared and submitted pursuant to Specification 6.9.1.6 of Appendix A (Technical Specifications) to the Palo Verde Nuclear Generating Station, Units 1, 2 and 3 Operating Licenses. By copy of this letter, we are also forwarding the Monthly Operating Reports to the Regional Administrator of the Region V Office.

If you have any questions, please contact Mr. K. F. Porter, at (602) 371-4187.

Very truly yours,

W. C. Marsh
Plant Director

JGH/KFP/dlm
Attachments

cc: M. J. Davis (all w/attachments)
J. B. Martin
T. J. Polich
J. A. Amenta
INPO Records Center

IE24
1/1

bcc: E. E. Van Brunt, Jr. (7040) (all w/attachments)
J. N. Bailey (7040)
A. C. Gehr (4141)
R. J. Adney (6915)
J. E. Allen (7106)
J. M. Allen (6123)
D. B. Andrews (6345)
R. A. Bernier (7048)
F. C. Buckingham (6451)
M. L. Clyde (6079)
K. B. Contois (6985)
B. S. Ecklund (7035)
R. E. Gouge (6486)
D. A. Hackbert (6795)
D. E. Hardy (8038)
D. R. Heinicke (6452)
W. E. Ide (6932)
J. R. LoCicero (6144)
W. C. Marsh (6123)
R. W. Page (7102)
K. F. Porter (7035)
W. F. Quinn (7040)
A. C. Rogers (7048)
S. L. Schey (6231)
J. J. Scott (6428)
T. D. Shriver (6148)
K. M. Johnson (6077)
G. W. Sowers (6081)
C. R. Stevens (7006)
C. H. Teeter (7102)
P. L. Vogt (9184)
S. Lawson (7434)
P. J. Wiley (6920)
D. Wootten (7035)
R. E. Younger (6070)
D. Kahler (6345)
W. F. Conway (9012)
J. T. Reilly (6102)
B. W. McCaskey (6086)
D. L. Metz (2208)

NRC MONTHLY OPERATING REPORT

DOCKET NO. 50-528
UNIT NAME PVNGS-1
DATE 09/13/89
COMPLETED BY K. F. Porter
TELEPHONE (602) 371-4187

OPERATING STATUS

1. Unit Name: Palo Verde Nuclear Generating Station, Unit 1
2. Reporting Period: August 1989
3. Licensed Thermal Power (MWt): 3800
4. Nameplate Rating (Gross MWe): 1403
5. Design Electrical Rating (Net MWe): 1270
6. Maximum Dependable Capacity (Gross MWe): 1303
7. Maximum Dependable Capacity (Net MWe): 1221
8. If Changes Occur In Capacity Ratings (Items Number 3 Through 7) Since Last Report, Give Reasons: N/A
9. Power Level to Which Restricted, If Any (Net MWe): None
10. Reasons For Restrictions, If Any: N/A

	This Month	Yr.-to-Date	Cumulative
11. Hours in Reporting Period	744	5,832	31,488.0
12. Number of Hours Reactor Was Critical	0	1,522.0	17,262.1
13. Reactor Reserve Shutdown Hours	0	0	0
14. Hours Generator On-Line	0	1,522.0	16,826.9
15. Unit Reserve Shutdown Hours	0	0	0
16. Gross Thermal Energy Generated (MWH)	0	5,565,298	60,931,221
17. Gross Electrical Energy Generated (MWH)	0	1,933,700	21,163,100
18. Net Electrical Energy Generated (MWH)	0	1,796,575	19,793,190.0
19. Unit Service Factor	0%	26.1%	53.4%
20. Unit Availability Factor	0%	26.1%	53.4%
21. Unit Capacity Factor (Using MDC Net)	0%	25.2%	51.5%
22. Unit Capacity Factor (Using DER Net)	0%	24.3%	49.5%
23. Unit Forced Outage Rate	0%	34.6%	28.1%

24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each): N/A
25. If Shutdown At End of Report Period, Estimated Date of Startup: October 27, 1989

	Forecast	Achieved
INITIAL CRITICALITY	05/85	05/25/85
INITIAL ELECTRICITY	06/85	06/10/85
COMMERCIAL OPERATION	11/85	01/28/86

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-528
UNIT NAME PVNGS-1
DATE 09/13/89
COMPLETED BY K. F. Porter
TELEPHONE (602) 371-4187

MONTH: AUGUST 1989

DAY	AVERAGE DAILY POWER LEVEL	DAY	AVERAGE DAILY POWER LEVEL
1	0	17	0
2	0	18	0
3	0	19	0
4	0	20	0
5	0	21	0
6	0	22	0
7	0	23	0
8	0	24	0
9	0	25	0
10	0	26	0
11	0	27	0
12	0	28	0
13	0	29	0
14	0	30	0
15	0	31	0
16	0		

REFUELING INFORMATION

DOCKET NO. 50-528
UNIT NAME PVNGS-1
DATE 09/13/89
COMPLETED BY K. F. Porter
TELEPHONE (602) 371-4187

1. Scheduled date for next refueling shutdown.

   03/01/91, 3rd refueling.

2. Scheduled date for restart following refueling.

   06/03/91

3. Will refueling or resumption of operation thereafter require a Technical Specification change or other license amendment?

   To be determined.

4. Scheduled date for submitting proposed licensing action and supporting information.

   To be determined.

5. Important Licensing considerations associated with refueling, e.g., new or different fuel design or supplier, unreviewed design or performance analysis methods, significant changes in fuel design, new operating procedures.

   The fuel vendor for the next reload will be Combustion Engineering.

6. The number of fuel assemblies

   a) In the core. 241

   b) In the spent fuel storage pool. 188

7. Licensed spent fuel storage capacity. 1329

   Intended change in spent fuel storage capacity. None

8. Projected date of last refueling that can be discharged to spent fuel storage pool assuming present capacity.

   2004 (18 Month reloads and full core discharge capability).

SUMMARY OF OPERATING EXPERIENCE FOR THE MONTH

DOCKET NO. 50-528
UNIT NAME PVNGS-1
DATE 09/13/89
COMPLETED BY K. F. Porter
TELEPHONE (602) 371-4187

AUGUST 1989

08/01	0000	Unit begins month in Mode 6, 2nd Refueling Outage.
08/31	2400	Unit ends month in Mode 6.

SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-528
UNIT NAME PVNGS-1
DATE 09/13/89
COMPLETED BY K. F. Porter
TELEPHONE (602) 371-4187

No.	Date	Type[1]	Duration Hours	Reason[2]	Method of Shutting Down Reactor[3]	LER No.	System Code[4]	Component Code[5]	Cause and Corrective Action to Prevent Recurrence
89/03	04/08/89	S	744	C	4	N/A	N/A	N/A	2nd refueling outage.

1
F-Forced
S-Scheduled

2
Reason:
A-Equipment Failure (Explain)
B-Maintenance or Test
C-Refueling
D-Regulatory Restriction
E-Operator Training & License Examination
F-Administrative
G-Operational Error
H-Other (Explain)

3
Method:
1-Manual
2-Manual Scram
3-Automatic Scram
4-Continuation from Previous Month
5-Reduction of 20% or Greater in the Past 24 Hours
9-Other-(Explain)

4
Exhibit F-Instructions for Preparation of the Data Entry Sheets for Licensee Event Report (LER) File (NUREG 0161)

5
Exhibit H-Same Source

NRC MONTHLY OPERATING REPORT

DOCKET NO. 50-529
UNIT NAME PVNGS-2
DATE 09/13/89
COMPLETED BY K. F. Porter
TELEPHONE (602) 371-4187

OPERATING STATUS

1. Unit Name: Palo Verde Nuclear Generating Station, Unit 2
2. Reporting Period: August 1989
3. Licensed Thermal Power (MWt): 3800
4. Nameplate Rating (Gross MWe): 1403
5. Design Electrical Rating (Net MWe): 1270
6. Maximum Dependable Capacity (Gross MWe): 1303
7. Maximum Dependable Capacity (Net MWe): 1221
8. If Changes Occur In Capacity Ratings (Items Number 3 Through 7) Since Last Report, Give Reasons: N/A
9. Power Level to Which Restricted, If Any (Net MWe): None
10. Reasons For Restrictions, If Any: N/A

		This Month	Yr.-to-Date	Cumulative
11.	Hours in Reporting Period	744	5,832	25,872
12.	Number of Hours Reactor Was Critical	744.0	2,813.0	17,838.1
13.	Reactor Reserve Shutdown Hours	0	0	0
14.	Hours Generator On-Line	699.2	2,649.1	17,389.8
15.	Unit Reserve Shutdown Hours	0.0	0.0	0.0
16.	Gross Thermal Energy Generated (MWH)	2,576,391	9,742,385	63,669,162
17.	Gross Electrical Energy Generated (MWH)	891,600	3,372,100	22,240,570
18.	Net Electrical Energy Generated (MWH)	836,936	3,114,787	20,798,840
19.	Unit Service Factor	94.0%	45.4%	67.2%
20.	Unit Availability Factor	94.0%	45.4%	67.2%
21.	Unit Capacity Factor (Using MDC Net)	92.1%	43.7%	65.8%
22.	Unit Capacity Factor (Using DER Net)	88.6%	42.1%	63.3%
23.	Unit Forced Outage Rate	6.0%	18.9%	7.8%

24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each): Refueling Outage - 01/90 - 90 Days
25. If Shutdown At End of Report Period, Estimated Date of Startup: N/A

	Forecast	Achieved
INITIAL CRITICALITY	03/86	04/18/86
INITIAL ELECTRICITY	06/86	05/20/86
COMMERCIAL OPERATION	11/86	09/19/86

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-529
UNIT NAME PVNGS-2
DATE 09/13/89
COMPLETED BY K. F. Porter
TELEPHONE (602) 371-4187

MONTH: AUGUST 1989

DAY	AVERAGE DAILY POWER LEVEL	DAY	AVERAGE DAILY POWER LEVEL
1	1243	17	1222
2	1240	18	1224
3	1225	19	1226
4	409	20	1231
5	0	21	1234
6	380	22	1192
7	1225	23	751
8	1242	24	1149
9	1243	25	1238
10	1242	26	1240
11	1233	27	1239
12	1227	28	1239
13	1227	29	1245
14	1225	30	1252
15	1224	31	1247
16	1223		

REFUELING INFORMATION

DOCKET NO. 50-529
UNIT NAME PVNGS-2
DATE 09/13/89
COMPLETED BY K. F. Porter
TELEPHONE (602) 371-4187

1. Scheduled date for next refueling shutdown.

   01/13/90, 2nd refueling.

2. Scheduled date for restart following refueling.

   04/20/90

3. Will refueling or resumption of operation thereafter require a Technical Specification change or other license amendment?

   Fig. 3.1-1A, Tables 3.1-2, 3.1-3, 3.1-5, Fig. 3.2-2, Fig. 3.2-2a
   Fig. 3.1-3, Fig. 3.1-4, Tech Spec 3.2.7

4. Scheduled date for submitting proposed licensing action and supporting information.

   10/89

5. Important Licensing considerations associated with refueling, e.g., new or different fuel design or supplier, unreviewed design or performance analysis methods, significant changes in fuel design, new operating procedures.

   To be determined.

6. The number of fuel assemblies

   a) In the core. 241

   b) In the spent fuel storage pool. 108

7. Licensed spent fuel storage capacity. 1329

   Intended change in spent fuel storage capacity. None

8. Projected date of last refueling that can be discharged to spent fuel storage pool assuming present capacity.

   2004 (18 Month reloads and full core discharge capability).

SUMMARY OF OPERATING EXPERIENCE FOR THE MONTH

DOCKET NO. 50-529
UNIT NAME PVNGS-2
DATE 09/13/89
COMPLETED BY K. F. Porter
TELEPHONE (602) 371-4187

AUGUST 1989

08/01	0000	Unit began month operating in Mode 1, 100% RX Power.
08/04	0823	Turbine trip on a false RX trip signal.
07/06	0513	Generator synchronized to grid.
08/07	0235	Unit reached 100% RX Power.
08/22	1956	Commenced power reduction to 65% for feedwater pump turbine maintenance.
08/24	1100	Unit back at 100% RX Power.
08/31	2400	Unit ended month in Mode 1, 100% RX Power.

SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-529
UNIT NAME PVNGS-2
DATE 09/13/89
COMPLETED BY K. F. Porter
TELEPHONE (602) 371-4187

No.	Date	Type[1]	Duration Hours	Reason[2]	Method of Shutting Down Reactor[3]	LER No.	System Code[4]	Component Code[5]	Cause and Corrective Action to Prevent Recurrence
89/06	08/04/89	F	44.8	A	5	N/A			Turbine trip on false RX trip signal.
89/07	08/22/89	S	0.0	B	5	N/A			Power reduced to 65% for FWPT maintenance.

1
F-Forced
S-Scheduled

2
Reason:
A-Equipment Failure (Explain)
B-Maintenance or Test
C-Refueling
D-Regulatory Restriction
E-Operator Training & License Examination
F-Administrative
G-Operational Error
H-Other (Explain)

3
Method:
1-Manual
2-Manual Scram
3-Automatic Scram
4-Continuation from Previous Month
5-Reduction of 20% or Greater in the Past 24 Hours
9-Other-(Explain)

4
Exhibit F-Instructions for Preparation of the Data Entry Sheets for Licensee Event Report (LER) File (NUREG 0161)

5
Exhibit H-Same Source

NRC MONTHLY OPERATING REPORT

DOCKET NO. 50-530
UNIT NAME PVNGS-3
DATE 09/13/89
COMPLETED BY K. F. Porter
TELEPHONE (602) 371-4187

OPERATING STATUS

1. Unit Name: Palo Verde Nuclear Generating Station, Unit 3
2. Reporting Period: August 1989
3. Licensed Thermal Power (MWt): 3800
4. Nameplate Rating (Gross MWe): 1403
5. Design Electrical Rating (Net MWe): 1270
6. Maximum Dependable Capacity (Gross MWe): 1303
7. Maximum Dependable Capacity (Net MWe): 1221
8. If Changes Occur In Capacity Ratings (Items Number 3 Through 7) Since Last Report, Give Reasons: N/A
9. Power Level to Which Restricted, If Any (Net MWe): None
10. Reasons For Restrictions, If Any: N/A

	This Month	Yr.-to-Date	Cumulative
11. Hours in Reporting Period	744.0	5,832	14,448
12. Number of Hours Reactor Was Critical	0	1,106.1	9,307.8
13. Reactor Reserve Shutdown Hours	0	0	0
14. Hours Generator On-Line	0	1,095.0	9,273.0
15. Unit Reserve Shutdown Hours	0	0	0
16. Gross Thermal Energy Generated (MWH)	0	4,090,086	34,402,824
17. Gross Electrical Energy Generated (MWH)	0	1,420,500	12,067,700
18. Net Electrical Energy Generated (MWH)	0	1,327,990	11,363,465
19. Unit Service Factor	0%	18.8%	64.2%
20. Unit Availability Factor	0%	18.8%	64.2%
21. Unit Capacity Factor (Using MDC Net)	0%	18.6%	64.4%
22. Unit Capacity Factor (Using DER Net)	0%	17.9%	61.9%
23. Unit Forced Outage Rate	0%	31.1%	9.1%

24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each): N/A
25. If Shutdown At End of Report Period, Estimated Date of Startup: September 29, 1989

	Forecast	Achieved
INITIAL CRITICALITY	07/87	10/25/87
INITIAL ELECTRICITY	07/87	11/28/87
COMMERCIAL OPERATION	09/87	01/08/88

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-530
UNIT NAME PVNGS-3
DATE 09/13/89
COMPLETED BY K. F. Porter
TELEPHONE (602) 371-4187

MONTH: AUGUST 1989

DAY	AVERAGE DAILY POWER LEVEL	DAY	AVERAGE DAILY POWER LEVEL
1	0	17	0
2	0	18	0
3	0	19	0
4	0	20	0
5	0	21	0
6	0	22	0
7	0	23	0
8	0	24	0
9	0	25	0
10	0	26	0
11	0	27	0
12	0	28	0
13	0	29	0
14	0	30	0
15	0	31	0
16	0		

REFUELING INFORMATION

DOCKET NO. 50-530
UNIT NAME PVNGS-3
DATE 09/13/89
COMPLETED BY K. F. Porter
TELEPHONE (602) 371-4187

1. Scheduled date for next refueling shutdown.

   11/17/90, 2nd refueling.

2. Scheduled date for restart following refueling.

   02/19/91

3. Will refueling or resumption of operation thereafter require a Technical Specification change or other license amendment?

   To be determined.

4. Scheduled date for submitting proposed licensing action and supporting information.

   To be determined.

5. Important Licensing considerations associated with refueling, e.g., new or different fuel design or supplier, unreviewed design or performance analysis methods, significant changes in fuel design, new operating procedures.

   The fuel vendor for the next reload will be Combustion Engineering.

6. The number of fuel assemblies

   a) In the core. 241

   b) In the spent fuel storage pool. 104

7. Licensed spent fuel storage capacity. 1329

   Intended change in spent fuel storage capacity. None

8. Projected date of last refueling that can be discharged to spent fuel storage pool assuming present capacity.

   2005 (18 Month reloads and full core discharge capability).

SUMMARY OF OPERATING EXPERIENCE FOR THE MONTH

DOCKET NO. 50-530
UNIT NAME PVNGS-3
DATE 09/13/89
COMPLETED BY K. F. Porter
TELEPHONE (602) 371-4187

AUGUST 1989

08/01	0000	Unit began month in Mode 6, 1st Refueling Outage.
08/15	1018	Unit entered Mode 5.
08/31	2400	Unit ended month in Mode 5.

SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-530
UNIT NAME PVNGS-3
DATE 09/13/89
COMPLETED BY K. F. Porter
TELEPHONE (602) 371-4187

No.	Date	Type[1]	Duration Hours	Reason[2]	Method of Shutting Down Reactor[3]	LER No.	System Code[4]	Component Code[5]	Cause and Corrective Action to Prevent Recurrence
89/03	03/08/89	S	744	C	4	N/A	N/A	N/A	Continuation of unit refueling outage.

1
F-Forced
S-Scheduled

2
Reason:
A-Equipment Failure (Explain)
B-Maintenance or Test
C-Refueling
D-Regulatory Restriction
E-Operator Training & License Examination
F-Administrative
G-Operational Error
H-Other (Explain)

3
Method:
1-Manual
2-Manual Scram
3-Automatic Scram
4-Continuation from Previous Month
5-Reduction of 20% or Greater in the Past 24 Hours
9-Other-(Explain)

4
Exhibit F-Instructions for Preparation of the Data Entry Sheets for Licensee Event Report (LER) File (NUREG 0161)

5
Exhibit H-Same Source