# Plant name: Palo Verde Nuclear Generating Station, Unit 1

**Docket Number:** 

50-528

1	The minimum	financial assurar	nce (MFA) estima	te pursuant to 10	0 CFR 50.75(	b) & (	(c):

\$469,000,000

Did the licensee identify the amount of estimated radiological funds? (Y/N)

Y

The total amount of dollars accumulated at the end of the appropriate year: (see below)

Licensee:	% Owned:	Category:	Amount in Trust Fund:
Arizona Public Service Company (APS)	29.10%	1	\$136,871,000
Salt River Project Agricultural Improvement and Power District (SRP)	17.49%	1	\$77,407,000
El Paso Electric Company (EPE)	15.80%	1	\$52,645,000
Southern California Edison Company (SCE)	15.80%	1	\$250,567,000
Public Service Company of New Mexico (PNM)	10.20%	1	\$50,022,000
Southern California Public Power Authority (SCPPA)	5.91%	1	\$51,678,000
Los Angeles Department of Water and Power (LADWP)	5.70%	1	\$40,435,000

Total Trust Fund Balance \$659,625,000

3 Schedule of the annual amounts remaining to be collected: (provided/none)

Provided

4 Assumptions used in determining rates of escalation in decommissioning costs, rates of earnings on decommissioning funds, and rates of other factors used in funding projections: (see below)

								Post-RAI	
Rate of Return on	Escalation Rate	Rate(s) of Other	Real Rate of Return	PUC Verified	Allowed through Decom (Y/N)	RAI Needed	PUC Verified	C	Rates Determined
Earnings		Factors	orrectarii	(Y/N)	(1/11)	(Y/N)	(Y/N)	Decom (Y/N)	(Y/N)
Variable <sup>1</sup>	Variable <sup>1</sup>		Variable <sup>1</sup>	N		Y	Y	N	$N^2$

5 Any contracts upon which the licensee is relying? (Y/N)

N

6 Any modifications to a licensee's method of providing decommissioning funding assurance? (Y/N)

N

Any material changes to trust agreements? (Y/N)

If a change has occurred, the reviewer will document on this sheet that a change has occurred and identify the reviewer who will evaluate the change: (see below)

<sup>&</sup>lt;sup>1</sup> Rates provided are considered variable because the rates are not consistent throughout the licensee(s) and/or years of operation.

<sup>&</sup>lt;sup>2</sup> For EPE, year-to-year rates cannot be determined from the submitted information since they are determined by the FERC, the Public Utility Commission of Texas and the New Mexico Public Regulation commission, which have issued various orders and rules related to decommissioning funding, investment criteria, and/or fund operations.

**Palo Verde Nuclear Generating Station, Unit 1** Plant name: **Docket Number:** 50-528

Day Month: Year: 31 12 2010 **Termination of Operations:** 2025 6

BWR/PWR	<u>MWth</u>	<u>1986\$</u>	ECI	Base Lx		<u>Lx</u>	Px	Latest Month Px	Base Px	Fx	Latest Month Fx	Base Fx		<u>Ex</u>		<u>Bx</u>
PWR	3990	\$105,000,000	112.5	2.06	0.65	2.32	1.676	191.4	114.2	3.049	250.0	82.0	0.13	2.253	0.22	12.28

**Site Specific: NRC Minimum:** \$472,584,981 \$529,232,000

		_	Amount of NRC Minimum/Site	
Licensee:	% Owned:	Category	Specific:	Amount in Trust Fund:
Arizona Public Service Company (APS)	29.10%	1	\$154,006,512	\$136,871,000
Salt River Project Agricultural Improvement and Power District (SRP)	17.49%	1	\$92,562,677	\$77,407,000
El Paso Electric Company (EPE)	15.80%	1	\$83,618,656	\$52,645,000
Southern California Edison Company (SCE)	15.80%	1	\$83,618,656	\$250,567,000
Public Service Company of New Mexico (PNM)	10.20%	1	\$53,981,664	\$50,022,000
Southern California Public Power Authority (SCPPA)	5.91%	1	\$31,277,611	\$51,678,000
Los Angeles Department of Water and Power (LADWP)	5.70%	1	\$0	\$40,435,000
•			Total Fund Balance:	\$659,625,000

Step 1: **Earnings Credit:** 

**Date of Operation:** 

	Real Rate of Return	Years Left		_	
Trust Fund Balance:	per year	in License	Total Earnings:	Does Licensee Pass:	l
\$659,625,000	2%	14.42	\$877,592,159	YES	ĺ

Step 2: **Accumulation:** 

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r:
2
_
7

Total Step 1 + Step 2	Does Licensee Pass:
\$1,017,454,016	YES

#### Step 3: **Decom Period:**

	Real Rate of Return	Decom	Total Earnings for
Total Earnings:	per year	Period:	Decom:
\$1,017,454,016	2%	7	\$75,640,415

Total of Steps 1 thru 3:	Does Licensee Pass:	Shortfall:	
\$1,093,094,431	YES	NO	

Signature: Michael Purdie and JoAnn Simpson

Date: 8/10/2011 Signature: Aaron L. Szabo Date: 8/22/2011

## Datasheet 2

Plant name: Palo Verde Nuclear Generating Station, Unit 1 Docket Number: 50-528

	Month:	Day	Year:
Date of Operation:	12	31	2010
<b>Termination of Operations:</b>	6	1	2025

If licensee is granted greater than 2% RRR

## Step 4: Earnings Credit:

		Real Rate	Years Left		
Owner	Trust Fund Balance:	of Return	in License	Total Earnings:	Does Licensee Pass:
APS	\$136,871,000	2.00%	14.42	\$905,770,440	YES
SRP	\$77,407,000	2.00%			
EPE	\$52,645,000	2.0375%			
SCE	\$250,567,000	2.00%			
PNM	\$50,022,000	4.50%			
SCPPA	\$51,678,000	2.00%			
LADWP	\$40,435,000	2.00%			

## Step 5: Accumulation:

Accumulation.			
	Real Rate of Return	Number of Annual	_
Value of Annuity per year	per year	Payments:	Total Annuity:
See Annuity Sheet	See Annuity Sheet	0	See Total Step 4
		_	-
_	Real Rate of Return	Years remaining after	_
Total Annuity	per year	annuity	Total Step 5
See Total Step 4	See Annuity Sheet	N/A	\$145,070,067

Total Step 4 + Step 5	Does Licensee Pass:
\$1,050,840,508	YES

#### Step 6: Decom Period:

_	Real Rate of Return	Decom	Total Earnings for
Total Earnings:	per year	Period:	Decom:
\$1,050,840,508	2.00%	7	\$78,122,461

Total of Steps 4 thru 6:	Does Licensee Pass:	Shortfall:
\$1,128,962,969	YES	NO

Signature: Michael Purdie and JoAnn Simpson Date: 8/10/2011

Signature: Aaron L. Szabo Date: 8/22/2011

# ANNUITY

Termination of Operations: 6 1

APS				
Year	Annuity:	Real Rate of Return:	Total Accumulation	
2011	\$2,044,352	2%	\$2,719,976	
2012	\$2,044,352	2%	\$2,666,643	
2013	\$2,044,352	2%	\$2,614,356	
2014	\$2,044,352	2%	\$2,563,094	
2015	\$2,044,352	2%	\$2,512,837	
2016	\$2,044,352	2%	\$2,463,566	
2017	\$2,044,352	2%	\$2,415,261	
2018	\$2,044,352	2%	\$2,367,903	
2019	\$2,044,352	2%	\$2,321,473	
2020	\$2,044,352	2%	\$2,275,954	
2021	\$2,044,352	2%	\$2,231,328	
2022	\$2,044,352	2%	\$2,187,576	
2023	\$2,044,352	2%	\$2,144,682	
2024	\$2,044,352	2%	\$2,102,630	
2025	\$2,044,352	2%	\$2,061,402	
		Total:	\$33,587,2	

		SRP	
Year	Annuity:	Real Rate of Return:	Total Accumulation:
2011	\$1,608,000	2%	\$2,139,417
2012	\$1,704,000	2%	\$2,222,689
2013	\$1,804,000	2%	\$2,306,989
2014	\$1,911,000	2%	\$2,395,905
2015	\$2,024,000	2%	\$2,487,821
2016	\$2,144,000	2%	\$2,583,648
2017	\$2,271,000	2%	\$2,683,030
2018	\$2,406,000	2%	\$2,786,787
2019	\$2,548,000	2%	\$2,893,393
2020	\$2,699,000	2%	\$3,004,766
2021	\$2,859,000	2%	\$3,120,483
2022	\$3,028,000	2%	\$3,240,137
2023	\$3,207,000	2%	\$3,364,390
2024	\$3,397,000	2%	\$3,493,837
		Total:	\$38,723,2

EPE				
Year	Annuity:	Real Rate of Return:	Total Accumulation:	
2011	\$2,980,838	2%	\$3,965,955	
2012	\$3,317,760	2%	\$4,328,844	
2013	\$3,449,163	2%	\$4,412,051	
2014	\$3,585,771	2%	\$4,496,858	
2015	\$4,065,222	2%	\$4,998,167	
2016	\$4,226,229	2%	\$5,094,239	
2017	\$4,393,613	2%	\$5,192,159	
2018	\$5,138,776	2%	\$5,953,682	
2019	\$5,342,302	2%	\$6,068,121	
2020	\$5,553,889	2%	\$6,184,760	
2021	\$6,957,220	2%	\$7,595,585	
2022	\$7,232,768	2%	\$7,741,584	
2023	\$7,519,229	2%	\$7,890,389	
2024	\$7,817,036	2%	\$8,042,055	
		Total:	\$81,964,45	

SCE				
Year	Annuity:	Real Rate of Return:	Total Accumulation:	
2011	\$0	2%	\$0	
2012	<b>\$</b> 0	2%	\$0	
2013	<b>\$</b> 0	2%	\$0	
2014	<b>\$0</b>	2%	\$0	
2015	<b>\$0</b>	2%	\$0	
2016	<b>\$0</b>	2%	\$0	
2017	<b>\$0</b>	2%	\$0	
2018	<b>\$0</b>	2%	\$0	
2019	<b>\$0</b>	2%	\$0	
2020	<b>\$</b> 0	2%	\$0	
2021	<b>\$</b> 0	2%	\$0	
2022	<b>\$</b> 0	2%	\$0	
2023	<b>\$</b> 0	2%	\$0	
2024	<b>\$</b> 0	2%	\$0	
2025	\$0	2%	\$0	
		Total:	\$6	

		PNM	
Year	Annuity:	Real Rate of Return:	Total Accumulation:
2011	\$1,361,000	2%	\$1,810,788
2012	\$1,361,000	2%	\$1,775,282
2013	\$1,361,000	2%	\$1,740,472
2014	\$1,361,000	2%	\$1,706,346
2015	\$1,361,000	2%	\$1,672,888
2016	\$1,361,000	2%	\$1,640,086
2017	\$1,361,000	2%	\$1,607,928
2018	\$1,361,000	2%	\$1,576,400
2019	\$1,361,000	2%	\$1,545,490
2020	\$1,361,000	2%	\$1,515,186
2021	\$1,361,000	2%	\$1,485,476
2022	\$1,361,000	2%	\$1,456,349
2023	\$1,361,000	2%	\$1,427,794
2024	\$1,361,000	2%	\$1,399,798
		Total:	\$20,960,48

		<b>SCPPA</b>	
Year	Annuity:	Real Rate of Return:	Total Accumulation:
2011	(\$1,570,384)	2%	(\$2,089,369)
2012	(\$1,570,384)	2%	(\$2,048,401)
2013	(\$1,570,384)	2%	(\$2,008,237)
2014	(\$1,570,384)	2%	(\$1,968,859)
2015	(\$1,570,384)	2%	(\$1,930,254)
2016	(\$1,570,384)	2%	(\$1,892,406)
2017	(\$1,570,384)	2%	(\$1,855,300)
2018	(\$1,570,384)	2%	(\$1,818,922)
2019	(\$1,570,384)	2%	(\$1,783,257)
2020	(\$1,570,384)	2%	(\$1,748,291)
2021	(\$1,570,384)	2%	(\$1,714,011)
2022	(\$1,570,384)	2%	(\$1,680,403)
2023	(\$1,570,384)	2%	(\$1,647,454)
2024	(\$1,570,384)	2%	(\$1,615,151)
		Total:	(\$24,185,164

		LADWP	
Year	Annuity:	Real Rate of Return:	Total Accumulation:
2011	(\$917,826)	2%	(\$1,221,152)
2012	(\$917,826)	2%	(\$1,197,208)
2013	(\$917,826)	2%	(\$1,173,733)
2014	(\$917,826)	2%	(\$1,150,719)
2015	(\$917,826)	2%	(\$1,128,156)
2016	(\$917,826)	2%	(\$1,106,035)
2017	(\$917,826)	2%	(\$1,084,348)
2018	(\$917,826)	2%	(\$1,063,086)
2019	(\$917,826)	2%	(\$1,042,241)
2020	(\$917,826)	2%	(\$1,021,805)
2021		2%	\$0
2022		2%	\$0
2023		2%	\$0
2024		2%	\$0
		Total:	(\$11,188,484

TOTAL: \$139,861,857

If licensee is granted greater than 2% RRR

Year	Annuity:	Real Rate of Return:	Total Accumulation:
2011	\$2,044,352	2%	\$2,719,976
2012	\$2,044,352	2%	\$2,666,643
2013	\$2,044,352	2%	\$2,614,356
2014	\$2,044,352	2%	\$2,563,094
2015	\$2,044,352	2%	\$2,512,837
2016	\$2,044,352	2%	\$2,463,566
2017	\$2,044,352	2%	\$2,415,261
2018	\$2,044,352	2%	\$2,367,903
2019	\$2,044,352	2%	\$2,321,473
2020	\$2,044,352	2%	\$2,275,954
2021	\$2,044,352	2%	\$2,231,328
2022	\$2,044,352	2%	\$2,187,576
2023	\$2,044,352	2%	\$2,144,682
2024	\$2,044,352	2%	\$2,102,630
2025	\$2,044,352	2%	\$2,061,402
		Total:	\$33,587,278

SRP				
Year	Annuity:	Real Rate of Return:	Total Accumulation:	
2011	\$1,608,000	2%	\$2,139,417	
2012	\$1,704,000	2%	\$2,222,689	
2013	\$1,804,000	2%	\$2,306,989	
2014	\$1,911,000	2%	\$2,395,905	
2015	\$2,024,000	2%	\$2,487,821	
2016	\$2,144,000	2%	\$2,583,648	
2017	\$2,271,000	2%	\$2,683,030	
2018	\$2,406,000	2%	\$2,786,787	
2019	\$2,548,000	2%	\$2,893,393	
2020	\$2,699,000	2%	\$3,004,766	
2021	\$2,859,000	2%	\$3,120,483	
2022	\$3,028,000	2%	\$3,240,137	
2023	\$3,207,000	2%	\$3,364,390	
2024	\$3,397,000	2%	\$3,493,837	
		Total:	\$38,723,29	

Year	Annuity:	Real Rate of Return:	Total Accumulation
2011	\$2,980,838	2.0375%	\$3,987,031
2012	\$3,317,760	2.0375%	\$4,349,070
2013	\$3,449,163	2.0375%	\$4,431,037
2014	\$3,585,771	2.0375%	\$4,514,549
2015	\$4,065,222	2.0375%	\$5,015,986
2016	\$4,226,229	2.0375%	\$5,110,522
2017	\$4,393,613	2.0375%	\$5,206,840
2018	\$5,138,776	2.0375%	\$5,968,322
2019	\$5,342,302	2.0375%	\$6,080,807
2020	\$5,553,889	2.0375%	\$6,195,412
2021	\$6,957,220	2.0375%	\$7,605,870
2022	\$7,232,768	2.0375%	\$7,749,218
2023	\$7,519,229	2.0375%	\$7,895,268
2024	\$7,817,036	2.0375%	\$8,044,070
		Total:	\$82,154,0

SCE				
Year	Annuity:	Real Rate of Return:	Total Accumulation:	
2011	\$0	2%	\$0	
2012	<b>\$</b> 0	2%	\$0	
2013	<b>\$0</b>	2%	\$0	
2014	<b>\$0</b>	2%	\$0	
2015	\$0	2%	\$0	
2016	\$0	2%	\$0	
2017	\$0	2%	\$0	
2018	\$0	2%	\$0	
2019	\$0	2%	\$0	
2020	\$0	2%	\$0	
2021	\$0	2%	\$0	
2022	\$0	2%	\$0	
2023	\$0	2%	\$0	
2024	<b>\$0</b>	2%	\$0	
2025	\$0	2%	\$0	
		Total:	\$0	

		PNM	
Year	Annuity:	Real Rate of Return:	Total Accumulation:
2011	\$1,361,000	4.5%	\$2,567,460
2012	\$1,361,000	4.5%	\$2,456,900
2013	\$1,361,000	4.5%	\$2,351,100
2014	\$1,361,000	4.5%	\$2,249,856
2015	\$1,361,000	4.5%	\$2,152,973
2016	\$1,361,000	4.5%	\$2,060,261
2017	\$1,361,000	4.5%	\$1,971,542
2018	\$1,361,000	4.5%	\$1,886,643
2019	\$1,361,000	4.5%	\$1,805,400
2020	\$1,361,000	4.5%	\$1,727,655
2021	\$1,361,000	4.5%	\$1,653,259
2022	\$1,361,000	4.5%	\$1,582,066
2023	\$1,361,000	4.5%	\$1,513,938
2024	\$1,361,000	4.5%	\$1,448,745
		Total:	\$25,979,051

Year	Annuity:	Real Rate of Return:	Total Accumulation:
2011	(\$1,570,384)	2%	(\$2,089,369)
2012	(\$1,570,384)	2%	(\$2,048,401)
2013	(\$1,570,384)	2%	(\$2,008,237)
2014	(\$1,570,384)	2%	(\$1,968,859)
2015	(\$1,570,384)	2%	(\$1,930,254)
2016	(\$1,570,384)	2%	(\$1,892,406)
2017	(\$1,570,384)	2%	(\$1,855,300)
2018	(\$1,570,384)	2%	(\$1,818,922)
2019	(\$1,570,384)	2%	(\$1,783,257)
2020	(\$1,570,384)	2%	(\$1,748,291)
2021	(\$1,570,384)	2%	(\$1,713,918)
2022	(\$1,570,384)	2%	(\$1,680,403)
2023	(\$1,570,384)	2%	(\$1,647,454)
2024	(\$1,570,384)	2%	(\$1,615,151)
		Total:	(\$24,185,07

Year	Annuity:	Real Rate of Return:	Total Accumulation:
	v		
2011	(\$917,826)	2%	(\$1,221,152)
2012	(\$917,826)	2%	(\$1,197,208)
2013	(\$917,826)	2%	(\$1,173,733)
2014	(\$917,826)	2%	(\$1,150,719)
2015	(\$917,826)	2%	(\$1,128,156)
2016	(\$917,826)	2%	(\$1,106,035)
2017	(\$917,826)	2%	(\$1,084,348)
2018	(\$917,826)	2%	(\$1,063,086)
2019	(\$917,826)	2%	(\$1,042,241)
2020	(\$917,826)	2%	(\$1,021,805)
		Total:	(\$11,188,4

TOTAL: \$145,070,067