

ORIGINAL



0000097933

1 Timothy M. Hogan (004567)
2 ARIZONA CENTER FOR LAW RECEIVED
3 IN THE PUBLIC INTEREST
4 202 E. McDowell Rd., Suite 153 009 AUG 17 P 3: 59
Phoenix, Arizona 85004
(602) 258-8850

AZ CORP COMMISSION
DOCKET CONTROL

5 Attorneys for Western Resource Advocates
6

7 **BEFORE THE ARIZONA CORPORATION COMMISSION**

8 KRISTIN K. MAYES, CHAIRMAN
9 GARY PIERCE
10 PAUL NEWMAN
11 SANDRA D. KENNEDY
BOB STUMP

12 IN THE MATTER OF THE APPLICATION
13 OF ARIZONA PUBLIC SERVICE
14 COMPANY FOR A HEARING TO
15 DETERMINE THE FAIR VALUE OF THE
16 UTILITY PROPERTY OF THE COMPANY
17 FOR RATEMAKING PURPOSES, TO FIX A
18 JUST AND REASONABLE RATE OF
RETURN THEREON, TO APPROVE RATE
SCHEDULES DESIGNED TO DEVELOP
SUCH RETURN

Docket No. E-01345A-08-0172

**NOTICE OF FILING REVISED
EXHIBITS TO THE TESTIMONY
OF DAVID BERRY**

Arizona Corporation Commission
DOCKETED

AUG 17 2009

DOCKETED BY 

22 Western Resource Advocates ("WRA"), through its undersigned counsel, hereby
23 provides notice that it has this day filed the attached revised exhibits to the testimony of
24 David Berry in support of the Settlement Agreement.
25

1
2 DATED this 17th day of August, 2009.

3 ARIZONA CENTER FOR LAW IN
4 THE PUBLIC INTEREST

5 By 
6 Timothy M. Hogan
7 202 E. McDowell Rd., Suite 153
8 Phoenix, Arizona 85004
9 Attorneys for Western Resource Advocates

10 ORIGINAL and 13 COPIES of
11 the foregoing filed this 17th day
12 of August, 2009, with:

13 Docket Control
14 Arizona Corporation Commission
15 1200 W. Washington
16 Phoenix, AZ 85007

17 COPIES of the foregoing
18 electronically transmitted
19 this 17th day of August, 2009 to:

20 All Parties of Record
21
22
23
24
25

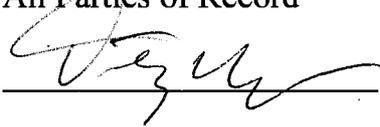


Exhibit DB-2 (Revised)
Summary of APS Renewable Resources

Status	Project/Plans	Start of Service to APS	Annual MWh
Existing and Committed*	Aragonne Mesa Wind	2006	298,455
	High Lonesome Wind	2009	300,000
	CE Turbo Geothermal	2006	71,545
	Snowflake Biomass	2008	86,000
	Sexton Biomass	2009	21,000
	Solana Concentrating Solar Power	2012	903,000
	Other APS owned photovoltaics and concentrating solar power	various	10,243
	Distributed energy	various	37,634
	Subtotal Existing and Committed Projects		
New	New Renewable Resources Target in Settlement Agreement includes: <ul style="list-style-type: none"> • Starwood Solar I (announced May 22, 2009): ~900,000 MWh per year; on-line in 2013 • Central station PV and wind projects incorporated in settlement agreement • Distributed solar energy projects at schools and government institutions incorporated in settlement agreement • Other projects not yet announced 	By 12/31/2015	1,700,000
Total	Total Annual Renewable Energy	By 12/31/2015	3,427,877
	APS Resource Plan Own Load Energy Requirements**	2015	34,996,800

* APS Renewable Energy Standard Annual Compliance Report for the Calendar Year Ending December 31, 2008, filed in Docket No. E-01345A-07-0468, April 1, 2009. Actual 2008 MWh for Aragonne Mesa, CE Turbo, and other APS owned photovoltaics and concentrating solar power, excluding multipliers. Actual annualized 2008 MWh plus reservations for distributed energy, excluding multipliers. Energy production for other projects reflects APS' projected annual production.

** APS Resource Plan Report, Appendix 1, Table 5.

Exhibit DB-4 (Updated August 12, 2009)
Approximate Costs of Utility Scale Renewable Energy

Technology	Approximate Cost \$/MWh (2009 \$)	Comments
Concentrating solar power with thermal storage	\$140 to \$163	Operational projects in Spain and the US utilize parabolic troughs and central receivers. Some utilize thermal storage. Costs may decrease as more projects are built.
Wind	\$57	Wind project costs vary by project capacity factor, wind farm generation capacity, transmission availability, and site specific features. Cost estimate includes \$4 per MWh integration cost.
Geothermal	\$58	Costs vary according to site specific conditions and type of plant (binary, flash)
Photovoltaics	Project specific	Prices may be falling rapidly as thin film technologies are deployed at large scale plants
Biomass	About \$71, but project specific	Numerous types of biomass plants may be deployed – e.g., landfill gas, wood waste, agricultural waste, etc. Costs depend on fuel source and technology.
New natural gas fired combined cycle plant	\$111	Cost per MWh is very dependent on fuel prices and capacity factor (assumed to be 35% here). Cost includes an assumed \$30 per metric ton cost of complying with carbon dioxide emission regulations.
New conventional coal-fired power plant	\$113	Cost includes an assumed \$30 per metric ton cost of complying with carbon dioxide emission regulations.