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BEFORE THE ARIZONA CORPORATION COMMISSION

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AZ CORP COMMISSION
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COMMISSIONERS

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IN THE MATTER OF ARIZONA PUBLIC SERVICE COMPANY REQUEST FOR APPROVAL OF UPDATED GREEN POWER RATE SCHEDULE GPS-1, GPS-2, AND GPS-3.

DOCKET NO. E-01345A-10-0394

IN THE MATTER OF THE APPLICATION OF ARIZONA PUBLIC SERVICE COMPANY FOR APPROVAL OF ITS 2013 RENEWABLE ENERGY STANDARD IMPLEMENTATION FOR RESET OF RENEWABLE ENERGY ADJUSTOR.

DOCKET NO. E-01345A-12-0290

IN THE MATTER OF THE APPLICATION OF TUCSON ELECTRIC POWER COMPANY FOR APPROVAL OF ITS 2013 RENEWABLE ENERGY STANDARD IMPLEMENTATION PLAN AND DISTRIBUTED ENERGY ADMINISTRATIVE PLAN AND REQUEST FOR RESET OF ITS RENEWABLE ENERGY ADJUSTOR.

DOCKET NO. E-01933A-12-0296

IN THE MATTER OF THE APPLICATION OF UNS ELECTRIC, INC. FOR APPROVAL OF ITS 2013 RENEWABLE ENERGY STANDARD IMPLEMENTATION PLAN AND DISTRIBUTED ENERGY ADMINISTRATIVE PLAN AND REQUEST FOR RESET OF ITS RENEWABLE ENERGY ADJUSTOR.

DOCKET NO. E-04204A-12-0297

NOTICE OF FILING STAFF SUMMARY OF CURRENT AND PAST ACC RENEWABLE ENERGY STANDARDS

Staff of the Arizona Corporation Commission ("Staff") hereby files its Summary of Current and Past ACC Renewable Energy Standards in the above docket. The Summary will be sponsored by Mr. Robert Gray, Staff's witness in this proceeding.

RESPECTFULLY SUBMITTED this 18th day of June, 2013.

Arizona Corporation Commission
DOCKETED

JUN 18 2013

DOCKETED BY *NR*

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Staff Summary of Current and Past Arizona Corporation Commission Renewable Energy Standards

In response to a request by the Administrative Law Judge during the hearing in the Track and Record proceeding, Staff provides the following summary of past and present renewable energy standards approved by the Arizona Corporation Commission (“ACC” or “Commission”). Later in this document is a series of tables that show past up-front incentive and performance based incentives for Arizona Public Service Company (“APS”), Tucson Electric Power Company (“TEP”) and UNS Electric Inc. (“UNS”) from 2008 through 2013.

In the mid-1990s the Solar Portfolio Standard (“SPS”) came about as part of the Commission’s consideration of retail electric competition rules. The retail electric competition efforts began in 1994 and culminated in Decision No. 59943 (December 26, 1996)¹, which, among other things, implemented the SPS. The SPS was in addition to the following amounts of renewable energy capacity utilities were required to install and have operating by December 31, 2000, based on Commission Decision No. 58643 (June 1, 1994)² which approved the utilities’ 1992 Integrated Resource Plans.

Utility	Required Renewable Capacity
Arizona Electric Power Cooperative	1,000 kW
APS	12,000 kW
Citizens Utilities Company	1,000 kW
TEP	5,000 kW

Under the SPS, starting on January 1, 1999, utilities had to procure at least 1/2 of 1 percent of their total retail energy sold competitively from new solar resources, defined as solar resources installed on or after January 1, 1997. This percentage increased to at least one percent of total retail load sold competitively starting on January 1, 2002. The SPS included only photovoltaic and solar thermal electric resources. In Decision No. 61311 (January 11, 1999)³, the Commission stayed the effectiveness of the retail electric competition rules, including the SPS. In Decision No. 61634 (April 23, 1999)⁴, the Commission, made further revisions to the electric competition rules, and voted to eliminate the SPS.

¹ In the Matter of Competition in the Provision of Electric Services throughout the State of Arizona, ACC Docket No. U-0000-94-165, Opinion and Order (Decision No. 59943) (Dec. 26, 1996).

² In Re Integrated Resource Planning, ACC Docket No. U-0000-93-052, Order (Decision No. 58643) (June 1, 1994).

³ In the Matter of Competition in the Provision of Electric Services throughout the State of Arizona; Rehearing of Decision No. 61272, Stay of the Electric Competition Rules and a Temporary Waiver from Compliance with the Electric Competition Rules, Docket No. RE-00000C-94-0165, Order (Decision No. 61311) (January 11, 1994).

⁴ In the Matter of Competition in the Provision of Electric Services throughout the State of Arizona, Docket No. RE-00000C-94-0165, Order (Decision No. 61634) (April 23, 1999).

In April 1999 a docket was initiated and a new process begun to design an Environmentally Friendly Portfolio Standard also known as the Environmental Portfolio Standard (“EPS”). In Decision No. 62506 (May 4, 2000)⁵, the Commission approved an EPS and ordered Staff to commence a rulemaking proceeding to adopt rules consistent with this decision. This process culminated in Decision No. 63364 (February 8, 2001)⁶ where the Commission approved the EPS rules.

The EPS rules expanded the eligible list of technologies to include not only photovoltaics and solar thermal electric as under the SPS, but also solar water heating, solar air conditioning, landfill gas, wind, and biomass. From 2001-2003, at least half of the portfolio kiloWatt hour (“kWh”) must have been photovoltaics or solar thermal, with that percentage increasing to 60 percent from 2004 through 2012. The table below shows the percentage of retail energy sold which must have been met by renewables each year by load serving entities.

Year	Percentage Required Under the EPS
2001	0.2%
2002	0.4%
2003	0.6%
2004	0.8%
2005	1.0%
2006	1.05%
2007-2012	1.1%

Costs under the EPS were to be recovered under a combination of an existing System Benefits Charge, reallocation of demand side management funds and an Environmental Portfolio Surcharge. The surcharge was capped monthly at the lesser of \$0.000875 per kWh or \$0.35 per month per residential customer, \$13.00 per month per non-residential customer, and \$39.00 per month per non-residential customer over 3,000 kW.

On January 6, 2004, the Commission directed Staff to commence a workshop to consider changes to the EPS rules. A number of workshops and open meetings were held from 2004-

⁵ In the Matter of the Generic Investigation of the Development of a Renewable Portfolio Standard as a Potential Part of the Retail Electric Completion Rules, Docket No. E-00000A-99-0205, Opinion and Order (Decision No. 62506) (May 4, 2000).

⁶ In the Matter of the Notice of Proposed Rulemaking for the Environmental Portfolio Standard, Docket No. RE-00000C-00-0377, Opinion and Order (Decision No. 63364) (February 8, 2001).

2006 regarding possible changes to the EPS rules. In Decision No. 69127 (November 14, 2006)⁷, the Commission adopted the Renewable Energy Standard and Tariff (“REST”) rules. The REST rules were certified by the Attorney General’s office on June 15, 2007. On July 10, 2007, Staff made a filing in the REST rules docket indicating the REST rules would become effective on August 14, 2007.

In the initial Commission decisions on the APS, TEP, and UNS REST plans in April 2008, the Commission recognized that the REST rules superseded the EPS rules and any requirements therein and that any remaining EPS funds would be used toward meeting REST requirements.

The REST rules indicate that utilities must meet requirements under the rules to ensure reliable electric service at reasonable rates. Under the REST rules, utilities had to meet a growing percentage of their retails sales with renewable energy resources, increasing from 1.25 percent in 2006 to 15 percent in 2025. The table below shows the annual overall REST requirement and the portion of the overall requirement that constitutes the distributed energy (“DE”) resource carve-out. The rules indicate that this specific carve-out for DE resources was included for the purpose of improving system reliability. This carve-out began at 5 percent of the renewable requirement in 2007, rising gradually to level of 30 percent of the renewable requirement from 2012 through 2025. Utilities file a proposed annual REST plan on July 1st of each year for Commission consideration for the following calendar year. Annual compliance reports under the REST rules are filed with the Commission each April 1st. The REST rules introduced the concept of a Renewable Energy Credit (“REC”), with each REC representing each kWh derived from an Eligible Renewable Energy Resource.

Year	Total REST Requirement	DE Carve-out Share of Total REST Requirement
2006	1.25%	0
2007	1.50%	0.075%
2008	1.75%	0.175%
2009	2.0%	0.3%
2010	2.5%	0.5%
2011	3.0%	0.75%
2012	3.5%	1.05%
2013	4.0%	1.2%
2014	4.5%	1.35%
2015	5.0%	1.5%

⁷ In the Matter of the Proposed Rulemaking for the Renewable Energy Standard and Tariff Rules, Docket No. RE-00000C-05-0030, Opinion and Order (Decision No. 69127) (November 14, 2006).

2016	6.0%	1.8%
2017	7.0%	2.1%
2018	8.0%	2.4%
2019	9.0%	2.7%
2020	10.0%	3.0%
2021	11.0%	3.3%
2022	12.0%	3.6%
2023	13.0%	3.9%
2024	14.0%	4.2%
After 2024	15.0%	4.5%

Decision No. 71448 (December 30, 2009) required APS to acquire new renewable energy resources with annual generation or savings of at least 1.7 million megawatt-hours to be in service by 2015. Those new resources in combination with existing commitments were estimated to be approximately 10 percent of retail sales by the end of 2015. The REST rules requirement is 5 percent for 2015.

Residential and Commercial Up-Front Incentives (“UFI”) and Commercial Performance-Based Incentives (“PBI”) for APS, TEP, and UNS

The Residential and Commercial UFIs and Commercial PBIs for APS, TEP and UNS are initially established each year in the Commissions orders approving the companies proposed implementation plans.

Residential UFIs (\$/watt)

The table below shows the approved residential UFI at the beginning of each calendar year. In some years the incentive level was reduced below the initially approved incentive level for that year.

Year	APS	TEP	UNS
2008	\$3.00	\$3.00	\$3.00
2009	\$3.00	\$3.00	\$3.00
2010	\$3.00	\$3.00	\$3.00
2011	\$1.75	\$2.00	\$1.60
2012	\$0.75	\$0.75	\$1.00

2013	\$0.10	\$0.10	\$0.10
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Commercial UFIs (\$/watt)

The table below shows the approved commercial UFI at the beginning of each calendar year. In some years the incentive level was reduced below the initially approved incentive level for that year.

Year	APS	TEP	UNS
2008	\$2.50	\$2.50	\$2.50
2009	\$2.50	\$2.50	\$2.50
2010	\$2.50	\$2.50	\$2.50
2011	\$1.75	\$1.50	\$1.30
2012	\$0.75	\$0.55	\$1.00
2013	\$0.10	\$0.00	\$0.10

Commercial Performance-Based Incentive Caps (\$/kwh)

APS

Year	10-year contract	15-year contract	20-year contract
2008	\$0.202	\$0.187	\$0.180
2009	\$0.202	\$0.187	\$0.180
2010	\$0.182	\$0.168	\$0.162
2011	\$0.140	\$0.130	\$0.125
2012	\$0.084	\$0.082	\$0.080
2013	\$0	\$0	\$0

TEP

	Contract Length		
	10-year	15-year	20-year

2008	\$0.202	\$0.187	\$0.180
2009	\$0.202	\$0.187	\$0.180
2010	\$0.182	\$0.168	\$0.162
	Customer Size		
	50-500 kW	501-1000 kW	Over 1 MW
2011	\$0.142	\$0.122	\$0.102
	Customer Size		
	70-200 kW	201-400 kW	Over 400 kW
2012	\$0.072	\$0.068	\$0.064
2013	\$0.000	\$0.000	\$0.000

UNS

	Contract Length		
	10-year	15-year	20-year
2008	\$0.202	\$0.187	\$0.180
2009	\$0.202	\$0.187	\$0.180
2010	\$0.182	\$0.168	\$0.162
	Customer Size		
	50-500 kW	501-1000 kW	Over 1 MW
2011	\$0.142	\$0.122	\$0.102
	Customer Size		
	70-200 kW	201-400 kW	Over 400 kW
2012	\$0.092	\$0.088	\$0.084
2013	\$0.068	\$0.064	\$0.060