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BEFORE THE ARIZONA CORPORATION COMMISSION

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AZ CORP COMMISSION
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Arizona Corporation Commission
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IN THE MATTER OF THE PROPOSED
RULEMAKING ON ELECTRIC ENERGY
EFFICIENCY

Docket No. RE-00000C-09-0427

SWEEP COMMENTS ON THE
PROPOSED RULEMAKING ON
ELECTRIC ENERGY EFFICIENCY

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The Southwest Energy Efficiency Project (SWEEP) appreciates the opportunity to submit comments on the proposed Rulemaking on Electric Energy Efficiency as set forth in Commission Decision No. 71436. SWEEP strongly supports the proposed Electric Energy Efficiency Rule for the following reasons:

1. The proposed Electric Energy Efficiency Rule is in the public interest.

Increasing energy efficiency as set forth in the proposed Rule is in the public interest because doing so will provide significant and cost-effective benefits for Arizona utility ratepayers (residential consumers and businesses), the electric system, the economy, and the environment. Increasing energy efficiency will save money for consumers and businesses through lower electric bills, resulting in lower total electric costs for utility ratepayers. Increasing energy efficiency will also reduce load growth, diversify energy resources, enhance the reliability of the electric grid, reduce the amount of water used for power generation, reduce air pollution and carbon emissions, and create jobs and improve the Arizona economy.

2. Increasing energy efficiency through the Rule and Standard will reduce the total energy costs for the ratepayers of the Affected Utilities regulated by the Commission.

Energy efficiency is a reliable energy resource that costs less than other resources for meeting the energy needs of utility ratepayers. The total cost (sum of program and customer costs) for energy efficiency savings is two to five cents per lifetime kWh saved, delivered to the customer. This is significantly less than the cost of conventional electric

1 generation, transmission, and distribution. The utility program cost to ratepayers is even
2 lower, about two cents per lifetime kWh saved for a comprehensive portfolio of programs
3 designed to serve all customer sectors. For example, as Arizona Public Service Company
4 (APS) has been ramping up its programs in 2005-2009, the energy efficiency savings
5 have been achieved at an actual cost to APS ratepayers of about one cent per kWh saved.

6
7 The energy efficiency measures and programs are required to be cost-effective prior to
8 approval by the Commission. By definition, the value of the energy cost savings to
9 customers must exceed the costs of the program, resulting in lower total energy costs for
10 the utility ratepayers. Also, the actual savings, benefits, and costs are evaluated and
11 reported to the Commission for its review. Therefore, increasing customer energy
12 efficiency through the Energy Efficiency Standard set forth in the Rule will reduce the
13 total cost of energy for the ratepayers of the Affected Utilities.

14
15 One example of a plan to increase customer energy efficiency in Arizona is the APS 2010
16 Implementation Plan. APS estimates that its 2010 programs will provide over \$165
17 million in energy cost savings and benefits to utility ratepayers over the lives of the
18 energy efficiency measures, and will provide net benefits (benefits exceeding costs) of
19 over \$100 million. The programs will provide over \$2.60 in benefits to ratepayers for
20 every dollar of total costs, and will leverage over \$3.30 in benefits for every dollar of
21 program costs. The 3,542,700 MWh of energy savings over the lives of the measures
22 will be achieved at a program cost of only 1.4 cents per kWh saved for customers.

23
24 The attached tables summarize the annual and cumulative energy savings for utility
25 ratepayers in the APS and TEP service territories that will result from the final adoption
26 and implementation of the Energy Efficiency Rule.

27
28 **3. Increasing energy efficiency will also reduce other costs, including**
29 **environmental costs and water costs, which are passed on to utility ratepayers.**

30
31 Increasing energy efficiency will reduce the costs of compliance with current and future
32 environmental regulations. Using less energy will result in less air pollution and fewer
33 carbon emissions and environmental impacts, thereby resulting in lower costs for
34 compliance with environmental regulations. Environmental costs are forecasted to
35 increase in the future, and energy efficiency can reduce the impact of these increasing
36 costs. Energy efficiency also saves water, thereby reducing water costs that are passed on
37 to utility ratepayers.

38
39 These environmental and water cost savings due to energy efficiency adopted because of
40 the Rule will reduce the cost of energy service for Arizona utility ratepayers.

1
2 **4. Increasing energy efficiency will increase the reliability of the electric grid,**
3 **thereby ensuring reliable electric service for the customers of the Affected**
4 **Utilities.**

5
6 Increasing energy efficiency will reduce load growth, diversify energy resources, and
7 enhance the reliability of the electricity grid. Energy efficiency is a distributed resource
8 located close to customer load, thereby reducing the pressure on and costs of electric
9 distribution and transmission.

10
11 **5. By adopting a final Rule and Energy Efficiency Standard, the Commission will**
12 **be ensuring reliable electric service at reasonable rates and costs for utility**
13 **ratepayers.**

14
15 Energy efficiency will reduce the energy costs to ratepayers and help the Commission to
16 ensure reliability, while reducing the environmental impacts of electric service.

17
18 **6. The Commission, in parallel proceedings, is considering and addressing the**
19 **issues regarding disincentives to utility support of energy efficiency.**

20
21 The Commission, in parallel dockets and regulatory proceedings, including in Docket No.
22 E-00000J-08-0314 and workshops, has been reviewing and considering issues regarding
23 utility disincentives, cost recovery, and performance incentives. SWEEP believes the
24 Commission is focused on addressing these issues and has the appropriate proceedings
25 underway. These proceedings should continue in parallel and should not delay final
26 adoption of the Electric Energy Efficiency Rule.

27
28 **7. SWEEP urges the Commission to adopt a final Rule on Electric Energy**
29 **Efficiency to lower costs for utility ratepayers and to ensure reliable electric**
30 **service at just and reasonable rates.**

31
32 Thank you for the opportunity to submit these comments on the Energy Efficiency
33 Rulemaking and Energy Efficiency Standard.

ENERGY EFFICIENCY STANDARD (EES) AND RULES: 22% by 2020
 Southwest Energy Efficiency Project (SWEEP)
 APS Example

Net Energy Savings Impact, with 20% EE, and 2% DR Credit of the 22% Total
 (Does not analyze the 3% credit for prior savings)

Year	APS Forecast of Retail Energy Sales		Energy Efficiency Standard in Rule		Resulting % Energy Savings		Net Energy Savings at Customer Meter		Savings as % of Forecasted Retail Sales		Savings as % of Sales Adjusted for EE Savings	
	Retail Energy Sales Forecast (MWh)	% Annual Sales Growth	EES: Energy Efficiency Standard as % of Retail Sales in Prior Year	Nominal Annual Percent Savings	Cumulative Annual Energy Savings as % of Retail Sales in Prior Year	Nominal Annual Percent Energy Savings	Cumulative Annual Energy Savings (MWh)	Incremental Annual Energy Savings (MWh)	Cumulative Annual Energy Savings as a % of Forecasted Retail Sales	Annual Energy Savings as % of Forecasted Retail Sales	Cumulative Annual Energy Savings as % of Adjusted Retail Sales*	Annual Energy Savings as % of Adjusted Retail Sales*
2005	26,477,551				Estimated		17,967					
2006	27,970,397	5.6%			Resulting % Energy Savings		94,433					
2007	29,171,321	4.3%					288,279					
2008	28,793,588	-1.3%					524,552					
2009	29,220,779	1.5%					739,765					
2010	29,591,837	1.3%					1,036,611					
2011	29,962,894	1.3%	1.25%	1.13%			321,246		1.07%	1.07%	1.08%	1.08%
2012	30,426,716	1.5%	3.00%	2.70%			800,324		2.63%	1.57%	2.70%	1.62%
2013	31,168,831	2.4%	5.00%	4.50%			1,333,188		4.28%	1.71%	4.47%	1.79%
2014	32,189,239	3.3%	7.25%	6.53%			1,946,776		6.05%	1.91%	6.44%	2.03%
2015	33,395,176	3.7%	9.50%	8.55%			2,585,731		7.74%	1.91%	8.39%	2.07%
2016	34,647,495	3.8%	12.00%	10.80%			3,327,420		9.60%	2.14%	10.62%	2.37%
2017	35,946,197	3.7%	14.50%	13.05%			4,087,270		11.37%	2.11%	12.83%	2.39%
2018	37,198,516	3.5%	17.00%	15.30%			4,874,416		13.10%	2.12%	15.08%	2.44%
2019	38,404,453	3.2%	19.50%	17.55%			5,672,880		14.77%	2.08%	17.33%	2.44%
2020	39,610,390	3.1%	22.00%	20.00%			6,546,315		16.53%	2.21%	19.80%	2.64%
20% of 2020	7,922,078				Resulting % for energy savings (new and prior)		32,532,176					
Losses:	1,078				Maximum 2% credit for DR to get to 22%		6,546,315					
Notes:					Applied as a 10% annual credit for DR peak kW savings							
Example forecast above based on APS forecast of retail sales (from EES workshops)												
* Forecasted retail sales are adjusted by subtracting the cumulative annual energy savings. This results in "adjusted" retail sales accounting for the impact of the EE savings.												

Year	Retail Energy Sales Forecast (MWh)	% Annual Sales Growth	Adjusted Retail Energy Sales (MWh)*	% Annual Sales Growth
2005	26,477,551		26,477,551	
2006	27,970,397	5.6%	27,970,397	5.6%
2007	29,171,321	4.3%	29,171,321	4.3%
2008	28,793,588	-1.3%	28,793,588	-1.3%
2009	29,220,779	1.5%	29,220,779	1.5%
2010	29,591,837	1.3%	28,555,225	-2.3%
2011	29,962,894	1.3%	29,641,648	3.8%
2012	30,426,716	1.5%	29,626,392	-0.1%
2013	31,168,831	2.4%	29,835,644	0.7%
2014	32,189,239	3.3%	30,242,464	1.4%
2015	33,395,176	3.7%	30,809,446	1.9%
2016	34,647,495	3.8%	31,320,075	1.7%
2017	35,946,197	3.7%	31,858,927	1.7%
2018	37,198,516	3.5%	32,324,100	1.5%
2019	38,404,453	3.2%	32,731,573	1.3%
2020	39,610,390	3.1%	33,064,075	1.0%
20% of 2020	7,922,078		7,922,078	
Losses:	1,078			
Adjusted 2020 Sales*				33,064,075
Adjusted Growth				3,843,296

ENERGY EFFICIENCY STANDARD (EES) AND RULES: 22% by 2020
Southwest Energy Efficiency Project (SWEEP)
TEP Example

Net Energy Savings Impact, with 20% EE, and 2% DR Credit of the 22% Total
(Does not analyze the 3% credit for prior savings)

Year	TEP Forecast of Retail Energy Sales		Energy Savings		Savings as % of Forecasted Retail Sales		Savings as % of Sales	
	Retail Energy Sales Forecast (MWh)	Adjusted Sales	Cumulative Annual Energy Savings (MWh)	Incremental Annual Energy Savings (MWh)	Cumulative Annual Energy Savings as a % of Forecasted Retail Sales	Annual Energy Savings as % of Forecasted Retail Sales	Cumulative Annual Energy Savings as % of Adjusted Retail Sales*	Annual Energy Savings as % of Adjusted Retail Sales*
2005	8,874,985	8,874,985	7,003	7,003	1.09%	1.09%	1.10%	1.10%
2006	9,201,419	9,201,419	12,204	5,201	2.62%	2.62%	2.69%	1.59%
2007	9,634,406	9,634,406	15,564	3,360	4.32%	4.32%	4.51%	1.82%
2008	9,502,644	9,502,644	38,454	22,890	6.15%	6.15%	6.55%	2.02%
2009	9,505,340	9,505,340	79,513	41,059	7.91%	7.91%	8.59%	2.00%
2010	9,653,820	9,504,022	149,798	70,285	1.55%	0.73%	1.58%	0.74%
2011	9,813,592	9,706,672	106,920	106,920	1.09%	1.09%	1.10%	1.10%
2012	10,003,633	9,741,553	262,080	155,160	2.62%	1.55%	2.69%	1.59%
2013	10,147,800	9,709,430	438,370	176,290	4.32%	1.74%	4.51%	1.82%
2014	10,299,385	9,665,845	633,540	195,170	6.15%	1.89%	6.55%	2.02%
2015	10,452,599	9,626,169	826,430	192,889	7.91%	1.85%	8.59%	2.00%
2016	10,600,942	9,561,315	1,039,626	213,197	9.81%	2.01%	10.87%	2.23%
2017	10,743,598	9,495,846	1,247,752	208,125	11.61%	1.94%	13.14%	2.19%
2018	10,884,712	9,431,847	1,452,864	205,113	13.35%	1.88%	15.40%	2.17%
2019	11,022,755	9,367,466	1,655,289	202,425	15.02%	1.84%	17.67%	2.16%
2020	11,164,391	9,290,898	1,873,493	218,204	16.78%	1.95%	20.16%	2.35%
20% of 2020	2,232,878		9,686,163					
Losses:	1,078		1,873,493					
Notes:			16.1%					
Example forecast above based on TEP forecast of retail sales			lower					
* Forecasted retail sales are adjusted by subtracting the cumulative annual energy savings. This results in "adjusted" retail sales accounting for the impact of the EE savings.			112.9% of sales growth (forecasted)				Adjusted 2020 Sales* Adjusted Growth	9,290,898 -214,443

Resulting % for energy savings (new and prior)

Maximum 2% credit for DR to get to 22%

Applied as a 10% annual credit for DR peak kW savings

Resulting % for energy savings (new and prior)

Maximum 2% credit for DR to get to 22%

Applied as a 10% annual credit for DR peak kW savings