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BEFORE THE ARIZONA CORPORATION COMMISSION

BOB STUMP
Chairman
GARY PIERCE
Commissioner
BRENDA BURNS
Commissioner
BOB BURNS
Commissioner
SUSAN BITTER SMITH
Commissioner

Arizona Corporation Commission
DOCKETED
DEC 31 2014
DOCKETED BY

IN THE MATTER OF THE APPLICATION OF TUCSON ELECTRIC POWER COMPANY FOR APPROVAL OF ITS 2015 RENEWABLE ENERGY STANDARD IMPLEMENTATION PLAN.

DOCKET NO. E-01933A-14-0248

DECISION NO. **74884**

ORDER

Open Meeting
December 18 and 19, 2014
Phoenix, Arizona

BY THE COMMISSION:

FINDINGS OF FACT

1. Tucson Electric Power Company ("TEP" or "Company") is engaged in providing electric service within portions of Arizona, pursuant to authority granted by the Arizona Corporation Commission ("ACC" or "Commission").

2. On July 1, 2014, Tucson Electric Power Company ("TEP" or "Company") filed for Arizona Corporation Commission ("Commission") approval of its 2015 Renewable Energy Standard and Tariff ("REST") Implementation Plan. On July 18, 2014, TEP filed Exhibit 9 to its REST implementation plan.

3. On July 21, 2014, the Arizona Solar Deployment Alliance filed to intervene in this proceeding; this request was granted on July 31, 2014. On July 31, 2014, Kevin Koch filed to intervene in this proceeding; this request was granted on August 11, 2014. On August 21, 2014, the Residential Utility Consumer Office ("RUCO") filed to intervene in this proceeding; this request was

granted on September 2, 2014. On September 15, 2014, The Clean Coalition filed comments. On September 16, 2014, The Alliance for Solar Choice ("TASC") filed to intervene in this proceeding; this request was granted on September 26, 2014. On October 15, 2014, the Sierra Club – Grand Canyon Chapter filed comments. On October 17, 2014 RUCO filed comments. A number of individuals also filed comments in the docket.

4. TEP's initial filing requests approval of various REST plan components, including a budget, customer class caps, various program details, introduction of a Company-owned rooftop solar program, and compliance matters.

TEP's Five Year Projection of Energy, Capacity, and Costs

5. The table below shows TEP's forecast for energy, capacity, and costs for its annual REST plans from 2015 through 2019.

TEP Energy, Capacity, and Cost Forecast					
	2015	**2016**	**2017**	**2018**	**2019**
Forecast Retail Sales MWh	9,189,835	9,452,893	10,037,708	10,363,922	10,523,289
% Renewable Energy Required	5.00%	6.00%	7.00%	8.00%	9.00%
Overall Renewable Requirement MWh	459,492	567,174	702,640	829,114	947,096
Utility Scale Requirement MWh	321,644	397,022	491,848	580,380	662,967
DG Requirement MWh	137,848	170,152	210,792	248,734	284,129
Res DG Requirement MWh	68,924	85076	105,396	124,367	142,064
Non-Res DG Requirement MWh	68,924	85076	105,396	124,367	142,064
Total Cumulative Required MW	263	324	402	474	541
Total Program Cost	$40,178,385	$45,260,634	$44,250,961	$33,026,749	$31,488,872

TEP REST Experience Under 2014 REST Plan

6. The Commission-approved implementation plan for 2014 contemplated total spending of $40.1 million and total recoveries through the REST surcharge of $33.6 million.

7. Regarding installations and reservations, the table below summarizes installations and reservations for installations through August 21, 2014 by TEP.

Residential	**Photovoltaics**		**Solar Hot Water**	
	Number of Systems	**kW (kWh)**	**Number of Systems**	**kWh**
2014 Installations	465	3,625	46	118,624

		(6,343,750)		
Reservations	1305	9,195 (16,091,250)	28	81,275

Commercial	Photovoltaics		Solar Hot Water	
	Number of Systems	kW (kWh)	Number of Systems	kW
2014 Installations	18	3,841 (6,739,250)	NA	NA
Reservations	41	10,567 (18,492,250)	NA	NA

In the month of September 2014, TEP received an additional 519 applications for residential DG, representing 3,952 kW of capacity.

8. Since TEP provided this information to Staff, TEP has subsequently indicated that residential DG activity in its service territory has ramped up significantly, with projected 2014 residential DG installations now expected to approach 20 MW. TEP has indicated to Staff that this represents the equivalent of what would be required for compliance under the REST rules for a three year period assuming the kWhs and/or Renewable Energy Credits ("RECs") from these installations were counted towards REST compliance.

9. Staff would note that TEP does not receive the RECs for these installations and thus does not count these installations toward its compliance with REST requirements. TEP has further indicated that while it expects to have enough residual RECs to be at or near compliance at the end of 2014, the Company expects to fall short of the REC requirement for residential DG in 2015.

Systems That Do Not Take a Utility Incentive

10. The following table shows the number, kW, and kWh of systems that have been installed in TEP's service territory that have not taken an incentive from TEP and thus TEP has not used the associated RECs to achieve compliance under the REST rules.

Residential	Number of Projects	kW	kWh
2012	0	0	0
2013	54	400	652,392
2014	681	4,685	7,692,746
Non-Residential			
2012	3	178.8	312,953

2013	8	5,011	8,769,688
2014	15	3,031	5,303,900

Commercial DG Over-compliance

11. Staff noted in its Staff Report on TEP's 2012 REST plan that TEP was significantly over-compliant for commercial DG and the Staff Report included a table that summarized the situation in 2012 and following years. Below is an updated table showing the current and projected status of commercial DG over-compliance. In summary, the size of the negative number on the last line indicates the size of the commercial DG over-compliance TEP projects for each year through 2019.

Commercial	2015	2016	2017	2018	2019
Sales Forecast	9,189,835,000	9,452,893,000	10,037,708,000	10,363,922,000	10,523,289,000
Overall Requirement	5.00%	6.00%	7.00%	8.00%	9.00%
Overall DG kWh Requirement	137,847,525	170,152,074	210,791,868	248,734,128	284,128,803
Non-Residential DG kWh Requirement	68,923,763	85,076,037	105,395,934	124,367,064	142,064,402
Existing Non-Residential kWh Prior to 2014	90,360,063	90,360,063	90,360,063	90,360,063	90,360,063
Incremental Non-Residential DG Requirement	7,699,953	16,152,275	20,319,897	18,971,130	17,697,338
10% Allowed kWh from Wholesale DG per R14.2.805	13,784,753	17,015,207	21,079,187	24,873,413	28,412,880
Estimated kWh from Ft. Huachuca DG Project	43,000,000	43,000,000	43,000,000	43,000,000	43,000,000
Total Required kWh Non-Residential DG After Adjustment	-78,221,053	-65,299,233	-49,043,316	-33,866,412	-19,708,542

Leased Versus Non-Leased Systems

12. TEP indicates that a significant majority of residential systems are leased in 2013 and into August 2014 (1,280 leased systems versus 738 non-leased systems). TEP indicates that 45 of 52 non-residential systems installed in 2013 and all 18 non-residential systems installed so far in 2014 are non-leased.

Research and Development

13. The Commission approved research and development ("R&D") funding at a level of $275,000 for 2014. TEP's proposed funding level for R&D in 2015 is $253,000. This includes funding for photovoltaic ("PV") panel lab degradation testing, solar test yard maintenance, the solar and wind forecast integration portal, an energy storage and grid operations study and dues for industry organizations. Staff believes TEP's proposed funding level for R&D is reasonable and should be approved.

Solar Hot Water Heating Funding

14. TEP's approved 2014 REST plan included the availability of funding for solar hot water heating of $60,000, with an incentive of $0.40 per kWh. TEP has indicated that at this incentive level in 2014, there continue to be solar hot water heating installations, and TEP estimates that most of these funds will be exhausted by the end of 2014. Staff believes that continued funding of solar water heating at the $60,000 level of an incentive of $0.40 per kWh in 2015 is reasonable. However, the Commission does not believe that additional funding for solar hot water incentives is warranted at the time.

Bright Tucson Solar Buildout Plan

15. In recent years the Commission has approved continuation of TEP's buildout program at a rate of $28 million annually. In Decision No. 74165 (October 25, 2013), the Commission approved $28 million in buildout program funding for 2014, with a further $12 million in 2015 for the Fort Huachuca project. TEP indicates in its current filing that it will no longer seek approval of buildout funding through the REST implementation plan, but rather will seek recovery of the cost of future utility-scale renewable energy projects via traditional cost recovery means. The table below shows the costs anticipated to be recovered through the REST budget in 2015-2017.

Line Item	2015	2016	2017
Carrying Costs	$3,826,682	$4,832,385	$4,519,820
Book Depreciation	$3,550,407	$4,438,532	$4,438,532
Property Tax Expense	$208,871	$392,960	$451,492
Operations and Maintenance	$436,570	$517,167	$532,682
Total	$8,022,529	$10,181,044	$9,942,526

Energy Storage Solicitation

16. TEP indicates in its application that it plans to issue a solicitation in 2015 for up to 10 MW of storage capacity. TEP indicates that as the grid experiences higher penetration levels of intermittent and variable renewable generation, the need for flexible resources such as energy storage will be needed to address a variety of operational issues. TEP seeks Commission guidance on how cost recovery for such a project would occur and specifically what the Commission views as the preferred cost recovery mechanism for costs for such a project at this time.

17. TEP believes that current allowable Federal Energy Regulatory Commission ("FERC") accounts for TEP's Purchased Power and Fuel Adjustment Clause ("PPFAC") would not provide for recovery of storage costs through that mechanism and that it is not clear whether such costs could be recovered through the REST surcharge. TEP's filing also indicates that the cost recovery mechanism could depend on the nature of the storage resource.

18. In discussions with TEP, the Company has indicated that it is likely, if it moved forward with an energy storage project as a result of the solicitation, that the Company would not build and operate a facility, but would rather enter into a long term purchased power type of agreement to contract with an entity for energy storage services, given the Company's lack of experience with such facilities.

19. Given these circumstances, Staff believes it is reasonable to provide guidance on what would be the preferred cost recovery method at this time, recognizing that the issue could be revisited in the future when the results of the solicitation are known and other relevant information may become available. In addition, Staff notes that the services TEP seeks in its energy storage solicitation are identical to the services in its already approved DR program. Staff further notes that TEP is currently recovering the costs of its DR program through its PPFAC, although Staff recommended

recovery through TEP's DSM surcharge. Therefore, approving recovery of the energy storage solicitation through its PPFAC would be consistent with this. Given that TEP indicates that the energy storage facility could be a power purchase-type agreement, Staff recommends cost recovery through the PPFAC be considered the preferred cost recovery method, for now.

20. Staff believes it is reasonable to discuss this issue further in the future when TEP brings further information before the Commission regarding its proposed energy storage solicitation.

21. Staff further recommends that TEP, as part of its 2016 REST plan filing, report the results of the energy storage solicitation to the Commission, including results of the solicitation, estimated customer impacts if recovered through the PPFAC, and other information TEP believes is relevant to the Commission's consideration of the energy solicitation results.

Utility-Owned Distributed Generation Program

22. TEP's application seeks Commission approval of a new program under which TEP would own residential customer-sited DG. To date, residential customer-sited DG has entailed either the customer owning the system or the system being installed under some kind of lease arrangement.

23. The Commission had previously approved a non-residential DG program, for TEP the Bright Roofs program that is similar to the Company's current proposal. The Bright Roofs program allowed TEP to own DG on non-residential rooftop locations and count such DG toward its non-residential DG REST requirements. However, there was little activity under the Bright Roofs program and the program was subsequently discontinued.

24. TEP proposes to spend up to $10 million under this new program to install approximately 3.5 MW of utility-owned residential rooftop DG, based on an expected installed cost of $2.85 to $3.00 per watt.[1] Assuming the typical system is installed under this program is approximately 6 KW, the program would enable the installation of roughly 600 residential DG systems. Given TEP's current installation rate, with TEP reporting more than 500 applications in the month of

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[1] TEP's expected capital cost closely approximates APS's estimated installed costs under APS's newly proposed utility-owned residential DG program. APS estimates installed cost ranging from $2.85 to $3.50 per watt.

September 2014, installations under this program are likely to represent a relatively small segment of the residential DG market in TEP's service territory.

25. Residential customers who participate in the program would enter into a contract with TEP to allow the Company to install a rooftop DG system on their roof. TEP would install a system that approximates the annual energy usage of the given customer in question. The customer would pay a fixed amount each month, approximately $99 for a typical residential customer, equivalent to what they are currently paying, for the life of the system ($93.00 plus taxes and surcharges).

26. The life of the system would be 25 years, based upon the manufacturer's warranty. The contract between TEP and the customer would include a buyout provision if the customer wished to buy the system at some point. If annual average monthly consumption rose or fell by more than 15 percent, the customer's fixed charge would be adjusted accordingly. TEP would prescreen rooftops so that installations under this program would only target roofs in good condition.

27. If a home with a utility-owned DG system was sold, the system would stay with the home and the new owner/resident of the home would assume responsibilities under the contract the original owner had signed with TEP (assuming the customer does not exercise the option to buy the system).

28. TEP is not seeking any cost recovery through the 2015 REST plan and would seek recovery of expenditures under this program in TEP's next rate case. The prudency of TEP's expenditures under this program would be reviewed in TEP's next rate case. TEP would credit back revenue beyond the customer charge ($10) and remaining fixed cost ($30.80) to pay for the capital costs of the systems. The table below shows a comparison provided by TEP of what a typical customer pays under different scenarios.

	Existing Customer	Net-Zero Customer	Customer under Proposed TEP Program
Customer Charge	$10.00	$10.00	
Delivery Margin	$20.20		
Fixed Costs	$30.80		
Fuel	$32.00		
Monthly Payment			$93.00

Total Monthly Payment (absent taxes and surcharges)	$93.00	$10.00	$93.00

29. TEP's program would enable the Company to retain the revenue stream from a customer who has rooftop solar in a way that does not occur with net-metering. Because of this, TEP's proposal may ameliorate the contentious issue of cost-shifting between rooftop and non-rooftop customers. Customers taking service under TEP's proposal would be paying costs through the fixed charge that otherwise would be passed to other customers through the lost fixed cost recovery ("LFCR") charge.

30. TEP would retain the RECs from systems under this program and these RECs would count toward REST compliance for TEP, though the volume of RECs from the proposed program would not be sufficient for TEP to maintain compliance with the REC requirements in a post-incentive environment.

31. TEP would contract with installers to install and maintain systems under the program. While TEP's filing references local installers, all vendors who meet TEP's specified requirements (discussed below) will be eligible to participate in the solicitation. TEP will use a traditional vendor solicitation process to select the installers. The solicitation will outline vendor product, installation, financial, and experience requirements, require licenses and permits, performance and warranty expectations, and costs.

32. TEP will enter into Master Service Agreements with selected installers as it does with other third party contractors. TEP will target installations to areas on its grid where DG will provide the most benefit to utility operations. TEP believes that this program will inherently provide access to DG to customers who were unable to install DG in the past due to financial constraints and/or low credit scores.

33. A benefit to TEP of the program is that it would be able to use its new systems communications network it is currently developing to allow TEP to communicate with and control the inverters on systems installed under the proposed program to provide benefits to the grid, such as voltage and frequency support.

34. TEP's proposal would provide TEP customers with a new option for installing rooftop solar that is different than options available now and this option would widen the pool of possible participants to some customers who were previously not able to pursue rooftop solar.

35. From information Staff has reviewed, Staff does not believe that the program will fully pay for itself, but rather it appears that it would significantly lessen the cost shift to non-participating ratepayers in comparison with a customer who currently purchases or leases a rooftop system. There are many uncertainties regarding how the program would fare in the renewable energy marketplace in comparison to other existing methods of rooftop DG deployment. The Commission's ability to review the prudency of this program in TEP's next rate case provides the Commission with the ability to protect ratepayer interests.

36. Staff believes that TEP's proposal should be viewed as a pilot program that will test a new method of rooftop DG delivery and should be reviewed in the future and modified as necessary, in addition to TEP's future rate proceedings when the prudency of the program may be considered.

37. In essence TEP's proposal is a way of treating company-owned rooftop DG in a manner similar to traditional generation resources, which are constructed and then put into rate base in future rate proceedings after review by the Commission.

38. While it is anticipated that the program's prudency and related matters would be considered in future TEP rate proceedings, Staff believes that it would be appropriate for TEP to report on its experience with the program as part of each future REST plan filing. Thus, Staff recommends that TEP include a discussion of the program in its annual REST plan filings, beginning with the 2016 REST plan to be filed in July 2015, as long as the program continues to exist.

39. Staff recommends approval of TEP's proposed program for utility-owned residential rooftop DG, with a limit on expenditures of $10 million.

40. In discussions with TEP, the Company has indicated that it believes that larger scale distributed generation facilities located in TEP's grid, possibly 1 MW or so, and structured similarly to TEP's proposed Company-owned DG program, could provide most of the benefits of rooftop DG at a reduced cost.

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41. Staff believes that this option, or a purchased power agreement for such a facility, is worthy of further exploration and recommends that TEP, as part of its 2016 REST plan filing, include a report on the feasibility, costs, benefits, and other aspects of these options and if TEP wishes, an implementation proposal, as part of TEP's REST activities. TEP's analysis should include a comparison of these options with company-owned and customer-owned distributed generation options.

2013 Funds Carried Forward to 2015 REST Budget

42. TEP's filing reflects the carry-forward of $6,826,415 in unspent funds from TEP's 2013 REST budget. The table below accounts for what line items of TEP's 2013 REST budget those funds came from.

2013 Tariff Revenue	-$1,588,251
Lower Cost Purchased Renewable Energy	$5,141,428
Customer Sited Distributed Renewable Energy	$2,427,555
Labor and Administration	$792,296
Other Budget Items	$18,633
Total Unspent 2013 REST funds	$6,826,415

43. The TEP and Staff REST budget proposal discussed herein reflect this carry-forward of unspent 2013 REST funds which reduce the amount of money required to be recovered through the 2015 REST surcharge.

Incentive Levels

44. Consistent with the Commission approved 2014 REST plan and budget, the only incentive money proposed for 2015 is a continuation of the solar water heater program as discussed above. The proposed budget also includes performance-based incentive funds to meet previously made commitments.

45. Staff notes that TEP projects it will not have enough RECs to achieve residential DG compliance for 2015. Even if the Commission approves TEP's proposal to own residential rooftop DG systems, TEP still expects to fall short of residential DG REC requirement in 2015. Staff notes the irony of this in light of the fact that TEP has experienced unprecedented levels of DG installations in 2014.

Proposed TEP and Staff Budgets

46. Staff has reviewed the budget proposal contained in TEP's proposed 2015 REST plan and agrees with TEP's proposed budget. The table below summarizes the budget being proposed by TEP and Staff.

Budget Components	2014 Approved Budget	2015 TEP and Staff Proposal	2015 Commission Approved
Purchased Renewable Energy			
Above market cost of conventional generation	$25,481,208	$22,971,774	$22,971,774
TEP Owned	$5,230,122	$8,022,529	$8,022,529
Subtotal	*$30,711,330*	*$30,994,303*	*$30,994,303*
Customer Sited Distributed Renewable Energy			
Residential PV UFI	$0	$0	$0
Non-Residential PV UFI	$0	$0	$0
Non-Residential PBI On-Going Commitments	$7,944,363	$7,214,196	$7,214,196
Residential/Non-residential Solar Water Heating UFI	$60,000	$60,000	$0
Meter Reading	$35,363	$35,363	$35,363
Customer Education and Outreach	$100,000	$100,000	$100,000
Subtotal	*$8,139,726*	*$7,409,559*	*$7,349,559*
Technical Training			
Internal and Contractor Training	$75,000	$85,000	$85,000
Subtotal	*$75,000*	*$85,000*	*$85,000*
Information Systems			
Subtotal	*$100,000*	*$100,000*	*$100,000*
Metering			
Subtotal	*$118,204*	*$501,680*	*$501,680*
Labor and Administration			
Internal Labor	$339,103	$468,442	$468,442
External Labor	$300,710	$302,401	$302,401
Materials, Fees, Supplies	$60,000	$60,000	$60,000
AZ Solar Website	$4,000	$4,000	$4,000
Subtotal	*$703,813*	*$834,843*	*$834,843*
Research and Development			
Energy Storage and Grid Study		$38,000	$38,000
PV Degradation Testing and Analysis	$53,000	$50,000	$50,000
Solar Test Yard Maintenance Equipment	$25,000	$50,000	$50,000
Solar and Wind Forecast Integration Portal	$182,000	$100,000	$100,000

Dues and Fees	$15,000	$15,000	$15,000
Subtotal	*$275,000*	*$253,000*	*$253,000*
Total Spending	*$40,123,073*	*$40,178,385*	*$40,118,385*
Carryover of Previous Year's Funds	*-$6,521,430*	*-$6,826,416*	*- $6,826,416*
Total Amount for Recovery	*$33,601,643*	*$33,351,969*	*$33,291,969*

Recovery of Funds Through 2015 REST Charge

47. TEP's proposed caps and per kWh charge are designed to recover TEP's proposed spending and recovery levels in 2015 and Staff's proposed caps and per kWh charge are designed to recover Staff's proposed budget of $40.1 million and recovery level of $33.5 million. Given the relatively similar amount to recover in 2015 in comparison to 2014, TEP is proposing to not change the class caps or surcharge level.

48. Staff believes that, given TEP's tendency to have funds left over at the end of each calendar year and that the difference, while not enormous, is still a significant amount of money, the residential customer cap should be reduced to reflect the lower amount to be recovered through the REST surcharge in 2015 under the TEP/Staff budget proposal. Staff therefore recommends adjusting the residential class cap downward to $3.78 to reflect the slightly lower amount to recover in 2015.

49. The table below shows the proposed surcharge per kWh for the TEP and Staff options as well as the proposed caps under each option, in comparison to what is currently in effect for 2014.

	2014 Approved	**2015 TEP Proposal**	**2015 Staff Proposal**
REST Charge (per kWh)	$0.008	$0.008	$0.008
Class Caps			
Residential	$3.83	$3.83	$3.78
Small General Service (Small Commercial)	$100.00	$100.00	$100.00
Large General Service (Large Commercial)	$1,015.00	$1,015.00	$1,015.00
Industrial and Mining	$8,000.00	$8,000.00	$8,000.00
Lighting	$100.00	$100.00	$100.00

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50. The cost recovery by customer class for the approved 2014 REST plan and estimates for the TEP and Staff options for the 2014 REST plan are shown in the table below. For comparison purposes, the table below also shows the projected MWH sales by customer class for 2014.

	2013 Actual Sales (MWH)	**2014 Approved**	**2015 TEP Proposal**	**2015 Staff Proposal**
Residential	3,836,078 (42.2%)	$14,587,641 (43.4%)	$14,779,396 (44.1%)	$14,632,163 (43.9%)
Small General Service	2,122,981 (23.3%)	$10,304,762 (30.6%)	$10,244,784 (30.6%)	$10,244,784 (30.7%)
Large General Service	1,124,481 (12.4%)	$5,626,584 (16.7%)	$5,727,369 (17.1%)	$5,727,369 (17.2%)
Industrial and Mining	1,969,950 (21.7%)	$2,880,000 (8.6%)	$2.496,000 (7.5%)	$2,496,000 (7.5%)
Lighting	32,350 (0.4%)	$234,711 (0.7%)	$256,281 (0.8%)	$256,281 (0.8%)
Total	9,085,840	$33,633,698	$33,503,830	$33,356,598

51. The table below shows the contribution, per kWh consumed, for each customer class (projected class cost recovery divided by projected class kWh sales). The table thus provides a comparison of the relative contribution to REST funding by each customer class on a per kWh basis.

Contribution by Customer Class (per kWh)	**2014 Approved**	**2015 TEP Proposal**	**2015 Staff Proposal**
Residential	$0.0038	$0.0039	$0.0038
Small Commercial	$0.0048	$0.0048	$0.0048
Large Commercial	$0.0048	$0.0051	$0.0051
Industrial/ Mining	$0.0015	$0.0013	$0.0013
Lighting	$0.0063	$0.0008	$0.0008

52. The table below shows the average REST charge by customer class as well as the percentage of customers at the cap for each customer class.

	2014 Approved	**2015 TEP Proposal**	**2015 Staff Proposal**
Residential - Average Bill	$3.25	$3.22	$3.19
Small Commercial - Average Bill	$18.94	$20.77	$20.77

Large Commercial - Average Bill	$778.98	$779.66	$779.66
Industrial and Mining - Average Bill	$8,000	$8,000	$8,000
Lighting - Average Bill	$15.49	$11.71	$11.71
Residential – Percent at Cap	72.0%	64.2%	64.2%
Small Commercial – Percent at Cap	8.4%	6.5%	6.5%
Large Commercial – Percent at Cap	46.9%	45.0%	45.0%
Industrial and Mining – Percent at Cap	100.0%	99.0%	99.0%
Lighting – Percent at Cap	0.7%	0.5%	0.5%

53. Estimated customer bill impacts for various monthly consumptions are shown in the table below.

Example Customer Types	kWh / mo.	2014 Approved	2015 TEP Proposal	2015 Staff Proposal
Residence Consuming	400	$3.20	$3.20	$3.20
Residence Consuming	850	$3.83	$3.83	$3.78
Residence Consuming	2,000	$3.83	$3.83	$3.78
Dentist Office	2,000	$16.00	$16.00	$16.00
Hairstylist	3,900	$31.20	$31.20	$31.20
Department Store	170,000	$100.00	$100.00	$100.00
Mall	1,627,100	$1015.00	$1015.00	$1015.00
Retail Video Store	14,400	$100.00	$100.00	$100.00
Large Hotel	1,067,100	$1015.00	$1015.00	$1015.00
Large Building Supply	346,500	$1015.00	$1015.00	$1015.00
Hotel/Motel	27,960	$100.00	$100.00	$100.00
Fast Food	60,160	$100.00	$100.00	$100.00
Large High Rise Office Bldg	1,476,100	$1015.00	$1015.00	$1015.00

Hospital (< 3 MW)	1,509,600	$1015.00	$1015.00	$1015.00
Supermarket	233,600	$1015.00	$1015.00	$1015.00
Convenience Store	20,160	$100.00	$100.00	$100.00
Hospital (> 3 MW)	2,700,000	$8,000.00	$8,000.00	$8,000.00
Copper Mine	72,000,000	$8,000.00	$8,000.00	$8,000.00

Staff Recommendations

54. Staff recommends that the Commission approve the Staff budget option for the 2015 REST plan, reflecting a REST surcharge of $0.00800 per kWh, and related caps of $3.78 for the residential class, $100.00 for the small general service class, $1,015.00 for the large general service class, $8,000.00 for the industrial and mining class, and $100.00 for the lighting class. This includes total spending of $40,178,385 and a total amount to be recovered through the REST surcharge of $33,351,969.

55. Staff further recommends that solar hot water heating continue to be funded at the $60,000 level, with an incentive level of $0.40 per kWh in 2015.

56. Staff further recommends that the Commission indicate that its current preference for cost recovery of a project resulting from TEP's energy storage solicitation is through the PPFAC, subject to further consideration in the future.

57. Staff further recommends that TEP file, as part of its 2016 REST plan proposal, information on the energy storage solicitation, including results of the solicitation, and other information TEP believes is relevant to the Commission's consideration of the energy solicitation results.

58. Staff further recommends approval of TEP's proposal for utility-owned residential distributed generation program, with a limit on expenditures of $10 million.

59. Staff further recommends that TEP, as part of its 2016 REST plan filing, include a report on the feasibility, costs, benefits, and other aspects of larger scale distributed generation options, either company-owned or through purchased power agreements, and if TEP wishes, a proposal to implement one of these options as part of TEP's REST activities. TEP's analysis should

include a comparison of these options with company-owned and customer-owned distributed generation options.

60. Staff further recommends that TEP include a discussion of the utility-owned residential distributed generation program in its annual REST plan filings, beginning with the 2016 REST plan to be filed in July 2015, as long as the program continues to exist.

61. Staff further recommends that TEP file the REST-TS1, consistent with the Decision in this case, within 15 days of the effective date of the Decision.

Commission Discussion

62. The Commission has received comments in opposition to TEP's proposed utility-owned residential distributed generation program. Most of these objections allege that TEP's program is at odds with the fair value provision of the Arizona Constitution. Some commenters also complain that TEP should not be permitted to own residential distributed generation assets.

63. TEP does not need our permission to acquire generation assets. Typically, public service corporations decide what type of generation assets to acquire for their resource portfolios. They then build and/or acquire those assets, and the Commission evaluates the prudence of those decisions in subsequent rate cases.

64. Nor does TEP generally need our permission to negotiate arrangements for the placement of its generation facilities. TEP is not required to seek our approval of the terms and conditions that it negotiates in order to acquire the real property upon which to place its various generation assets. Although such arrangements will be subject to our prudence review in a rate case, and although the siting statutes may apply in some instances, TEP's real property acquisitions—whether through purchase or lease—are generally not subject to our pre-approval.

65. Nor does this case present any constitutional impediments. Currently, the fair value of TEP's utility-owned residential distributed generation assets is zero, because the program has not yet begun, and there are no program assets. We therefore conclude that the fair value impact of TEP's proposal is de minimis at this time.

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66. Furthermore, TEP has not asked for—and we will not make—a prudence determination in this case. We will determine whether TEP may recover these costs in rates in a TEP rate case filing.

67. We would also note that the proposed size of this pilot program makes it extremely unlikely that there would ever be significant fair value impacts associated with it. We have authorized up to $10 million in future pilot program expenditures; however, TEP's fair value rate base is over $2.2 billion. The pilot program would be capped at six hundred participants, while TEP has over 400,000 customers. Even if TEP were to expend the full $10 million, and even if the program were to reach the participation cap, the fair value impact would still be de minimis due to the size of the program in comparison to the scope of TEP's overall operations.

68. In addition, the revenue impact of the program is also de minimis. The pilot program tariff that TEP proposes is designed to describe the parameters of the program, but it is not designed to generate additional revenue. Instead, it is intended to maintain the participating customers' rates at approximately their current levels as a means of compensating them for the use of their roofs. In other words, what might otherwise be structured as a separate and distinct lease payment (by TEP to participating customers) for the use of rooftop space is instead flowed through to the bill as an offset to rates. Although this offset is part of TEP's cost of service, TEP is not seeking rate recovery of it at this time.

69. We recognize the rapidly evolving environment in which TEP—as well as all electric distribution companies—must now operate. The onset of distributed generation has significantly impacted the electric distribution function, and we think it likely that the pace of technology necessarily requires electric distribution utilities to make creative adaptions to their business models.

70. Because we recognize that TEP has offered this proposal as a means of responding to these ongoing challenges, we will approve TEP's proposal as a pilot program in the form of a special contract tariff, subject to the following parameters:

a) The pilot program will be capped at six hundred participants.

b) TEP is required to include a "regulatory out" clause in its special contracts under this program to ensure that customers understand that their rates are subject to be changed by the Commission and that the program is subject to cancellation. Specifically, TEP shall include in each special contract for this program a provision that informs the participant that the Commission has the authority to modify the fixed rate and that, if the Commission modifies the program or the rate for existing participants, those participants may opt out of the program at no cost or penalty to the participant.

c) If a program participant sells his home, the program participant must pay a cost-based exit fee to terminate his participation in the program in the event that the homebuyer elects not to participate in the program. However, if the homebuyer elects to participate in the program, he may assume the seller's position in the existing special contract, and the seller will not be required to pay an exit fee. TEP's special contracts will include provisions that clearly and specifically set forth these requirements.

d) TEP shall be required to provide a cost/benefit analysis of the program and to report fully on all aspects of the program.

e) TEP shall be required to submit this program to the Commission for evaluation in its next rate case.

f) The $10 million for this program shall include operation and maintenance costs not to exceed 3.5 cents/watt per year.

71. Since this is a unique pilot program, TEP should form a voluntary, unpaid advisory committee that should advise the Company on a defined set of research goals. This advisory committee would be convened by TEP and include representatives involved in technological and operational aspects of rooftop solar and supporting infrastructure. This group of stakeholders should include, but not be limited to: Commission Staff, the Electric Power Research Institute ("EPRI"), the Residential Utility Consumer Office ("RUCO"), other Arizona electrical utility system operators or engineers, a rooftop solar industry representative, an inverter manufacturer representative, and university power systems engineering departments. The group should review the direction of the

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project and provide feedback on program design. Reports on the program results as well as any research findings should be made public.

72. Additionally, in the Company's annual report, the Company should provide information and documentation regarding the anticipated program benefits. This report should include, but not be limited to: (1) information regarding specific feeder capacity limits impacted by program installations; (2) avoided system reinforcements or capital improvements due to program installations; (3) operational impacts of the proposed distribution management system with respect to voltage and frequency control; and (4) any potential opportunities to study energy storage and PV coordination management at the feeder level.

73. The Commission seeks to ensure that the cost of the TEP program is similar to that of third-party programs; therefore, TEP commits to cost parity with current net metering rates, and if rate design is addressed in the future in a way that materially impacts existing net metering participants, TEP should evaluate options for existing solar customers, as well as TEP DG customers, to minimize any cost parity issues between the two groups and unintended impacts.

74. Our approval of this proposal as a pilot program, subject to the above specific parameters, is an attempt to balance the various competing considerations that rapid technological change has produced at this time.

CONCLUSIONS OF LAW

1. Tucson Electric Power Company is an Arizona public service corporation within the meaning of Article XV, Section 2 of the Arizona Constitution.

2. The Commission has jurisdiction over Tucson Electric Power Company and over the subject matter of the application.

3. The Commission, having reviewed the application and Staff's Memorandum dated November 3, 2014, concludes that it is in the public interest to approve Tucson Electric Power Company's 2015 Renewable Energy Standard and Tariff Implementation Plan, as discussed herein.

ORDER

IT IS THEREFORE ORDERED that the Staff budget option for the Tucson Electric Power Company's 2015 REST plan, reflecting a REST surcharge of $0.00800 per kWh, and related caps of

$3.76 for the residential class, $100.00 for the small general service class, $1,015.00 for the large general service class, $8,000.00 for the industrial and mining class, and $100.00 for the lighting class, be and hereby is approved. This includes total spending of $40,118,385 and a total amount to be recovered through the REST surcharge of $33,291,969.

IT IS FURTHER ORDERED that the Commission's current preference for cost recovery of a project resulting from Tucson Electric Power Company's energy storage solicitation is through the PPFAC, subject to further consideration in the future.

IT IS FURTHER ORDERED that Tucson Electric Power Company file, as part of its 2016 REST plan proposal, information on the energy storage solicitation, including results of the solicitation, and other information Tucson Electric Power Company believes is relevant to the Commission's consideration of the energy solicitation results.

IT IS FURTHER ORDERED that Tucson Electric Power Company's proposal for utility-owned residential distributed generation program, in particular, the Residential Solar – Company Owned Systems tariff reflected in Exhibit 9 of Tucson Electric Power Company's application, with a limit on expenditures of $10 million, be and hereby is approved, as discussed herein, and such $10 million should include operation and maintenance costs not to exceed 3.5 cents/watt per year. The Commission's approval of this pilot program should not be viewed as pre-approval for rate making purposes in a future rate case. No determination of prudency or determination of rate base treatment for ratemaking purposes is being made at this time. Such determinations will be made during the rate case in which TEP requests cost recovery of this project.

IT IS FURTHER ORDERED that TEP should form an advisory committee that should advise the Company on a defined set of research goals. This advisory committee would be convened by TEP and include representatives involved in technological and operational aspects of rooftop solar and supporting infrastructure. This group of stakeholders should include, but not be limited to: Commission Staff, the Electric Power Research Institute ("EPRI"), the Residential Utility Consumer Office ("RUCO"), other Arizona electrical utility system operators or engineers, a rooftop solar industry representative, an inverter manufacturer representative, and university power systems engineering departments. The group should review the direction of the project and provide feedback on program design. Reports on the program results as well as any research findings should be made public.

IT IS FURTHER ORDERED that Tucson Electric Power Company should ensure that the cost of the utility-owned residential distributed generation program is similar to that of third-party programs. Accordingly, TEP should commit to cost parity with current net metering rates, and if rate design is addressed in the future in a way that materially impacts existing net energy metering participants, TEP should evaluate options for existing solar customers, as well as TEP DG customers, to minimize any cost parity issues between the two groups and unintended impacts.

IT IS FURTHER ORDERED that Tucson Electric Power Company, as part of its 2016 REST plan filing, shall include a report on the feasibility, costs, benefits, and other aspects of larger scale distributed generation options, either company-owned or through purchased power agreements, and if Tucson Electric Power Company wishes, an implementation proposal, as part of their REST activities. Tucson Electric Power Company's analysis should include a comparison of these options with company-owned and customer-owned distributed generation options.

IT IS FURTHER ORDERED that Tucson Electric Power Company include a discussion of the utility-owned residential distributed generation program in its annual REST plan filings, beginning with the 2016 REST plan to be filed in July 2015, as long as the program continues to exist. This discussion shall include a cost/benefit analysis and shall fully report on all aspects of the program.

IT IS FURTHER ORDERED that Tucson Electric Power Company file the REST-TS1 and Residential Solar-Company-owned Systems Tariff, consistent with the Decision in this case, within 15 days of the effective date of the Decision.

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IT IS FURTHER ORDERED that a waiver to the REST requirements contained in R14-2-1804 and R14-2-1805 will be granted to Tucson Electric Power Company if its forecasted Planning Reserve Margin[2] is greater than or equal to eighteen percent (18%) each year for the next two years. To obtain this waiver, Tucson Electric Power Company must file with the Commission documentation demonstrating that its forecasted Planning Reserve Margin exceeds eighteen percent (18%) for at least the next two years and if obtained, the waiver shall apply for each year that the forecasted Planning Reserve Margin exceeds eighteen percent (18%).

IT IS FURTHER ORDERED that this Order shall become effective immediately.

BY THE ORDER OF THE ARIZONA CORPORATION COMMISSION

CHAIRMAN COMMISSIONER

COMMISSIONER COMMISSIONER COMMISSIONER

IN WITNESS WHEREOF, I, JODI JERICH, Executive Director of the Arizona Corporation Commission, have hereunto, set my hand and caused the official seal of this Commission to be affixed at the Capitol, in the City of Phoenix, this 31 day of December, 2014.

JODI JERICH
EXECUTIVE DIRECTOR

DISSENT: ______________________

DISSENT: ______________________

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2 As defined by North American Electric Reliability Corporation ("NERC"), Planning Reserve Margin equals the difference in Deliverable or Prospective Resources and Net Internal Demand, divided by Net Internal Demand. Deliverable Resources are calculated by the sum of Existing, Certain and Future, Planned Capacity Resources plus Net Firm Transactions. Prospective Resources include Deliverable Resources and Existing, Other Resources. Net Internal Demand equals Total Internal Demand less Dispatchable, Controllable Capacity Demand Response used to reduce load.

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