



0000133434

BEFORE THE ARIZONA CORPORATION COMMISSION


1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28

GARY PIERCE
Chairman
BOB STUMP
Commissioner
SANDRA D. KENNEDY
Commissioner
PAUL NEWMAN
Commissioner
BRENDA BURNS
Commissioner

Arizona Corporation Commission

DOCKETED

JAN 13 2012

DOCKETED BY 

IN THE MATTER OF TUCSON ELECTRIC
POWER COMPANY – APPLICATION FOR
APPROVAL OF ITS 2012 RENEWABLE
ENERGY STANDARD AND TARIFF
IMPLEMENTATION PLAN

DOCKET NO. E-01933A-11-0269

DECISION NO. 72736

ORDER

Open Meeting
December 13 and 14 2011
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.

2. On July 1, TEP filed for Arizona Corporation Commission (“Commission”) approval of its 2012 Renewable Energy Standard and Tariff (“REST”) Implementation Plan.

3. On July 15, 2011, TEP filed a REST plan summary and a set of PowerPoint slides summarizing its REST plan. On July 29, 2011, TEP filed a Notice of Errata, updating its REST plan and related exhibits.

4. The following parties have filed for intervention in this docket: The Solar Alliance on August 9, 2011; SolarCity Corporation (“SolarCity”) on August 2, 2011; Freeport McMoRan Copper and Gold Inc./Arizonans for Electric Choice and Competition (“Freeport”); Western Resource Advocates (“WRA”) on August 23, 2011; the Residential Utility Consumer Office

1 (“RUCO”) on August 31, 2011; The Arizona Solar Energy Industries Association (“AriSEIA”) on
2 September 29, 2011; Copernicus Energy on September 30, 2011; and Kevin Koch with
3 Technicians For Sustainability (“TFS”) on October 3, 2011 and October 17, 2011. Comments
4 have been filed in this proceeding by the following entities: The Solar Alliance on August 12 and
5 24, 2011; SolarCity on August 15, 2011; Carson Solar Technologies on August 22, 2011; The
6 Solar Store on August 22, 2011; the Southern Arizona Solar Standards Board on September 15,
7 2011; and Chad Waits with Net Zero Solar on October 5, 2011. Additionally, joint comments
8 were filed on August 15, 2011 by DRH Electric, SunRun Inc., Acro Energy Technologies Corp.,
9 SolarCity, RDS Electric, and Indicom Electric. Questions from Commissioners Offices were filed
10 on August 30 and September 7, 2011 from Commissioner Newman’s office, and September 2,
11 2011 from Commissioner Burns’ office. TEP filed answers to Commissioner Burns’ questions on
12 October 3, 2011 and to Commissioner Newman’s questions on October 11, 2011.

13 5. TEP’s initial filing requests approval of various REST plan components, including
14 a budget, incentive levels, an incentive trigger mechanism, customer class caps, various program
15 details, continuation of the Bright Tucson Solar Buildout Plan, continuation of the School
16 Vocational Program, consideration of Bright Roofs generation as non-residential distribution
17 generation for compliance purposes, and approval of research and development funding for 2011.

18 6. The initial filing contains two budgets, one which complies with last year’s REST
19 plan approval decision (Decision No. 72033, December 10, 2010) requiring maintenance of the
20 residential distributed generation (“DG”) budget at the same level in 2011 as it was at in 2010, and
21 one with a lower residential DG budget that would meet but not exceed residential DG
22 requirements.

23 **TEP REST Experience Under 2011 REST Plan**

24 7. The Commission-approved implementation plan for 2011 contemplated a budget of
25 \$35.9 million. TEP projects spending its entire REST budget in 2011.

26 8. Regarding installations and reservations, the table below summarizes installations
27 and reservations for installations through September 30, 2011 by TEP.

28 ...

	Photovoltaics		Solar Hot Water	
	Number of Systems	kW (kWh)	Number of Systems	kWh
2011 Installations	430	3,089 3,916,800	302	830,500
Reservations	487	3,436 12,911,500	548	1,506,448

	Photovoltaics		Solar Hot Water	
	Number of Systems	kW (kWh)	Number of Systems	kWh
2011 Installations	8	109 185,300	5	185,493
Reservations	41	3,660 10,489,000	28	2,634,728

9. The table below shows TEP's annual required MWh under the REST rules and its installed-annualized and installed-annualized/reserved numbers. Installed annualized numbers reflect systems that are installed and their production is annualized to reflect a full year's production. Installed-annualized/reserved counts both the installed annualized systems and the systems that are reserved, but have not yet been installed.

	Required (MWH)	Produced/Banked (MWH)
Residential DG	36,408	27,423 (installed – annualized) 37,093 (installed – annualized/reserved)
Commercial DG	36,408	33,565 (installed – annualized) 46,375 (installed – annualized/reserved)
Non-DG	218,445	368,124

School Vocational Program

10. In 2011 TEP began a new School Vocational Program ("SVP") that involved the deployment of 13 photovoltaic ("PV") systems at high schools within TEP's service territory in 2011. The program also provides assistance to schools in creating vocational training programs at the schools. The program budget in 2011 was \$650,000. TEP is proposing to continue the program at a level of \$650,000 in 2012. In discussions with TEP, the Company indicated that its budget is based upon installation of systems from 5 kW to 10 kW.

1 11. The Company has indicated to Staff that all systems installed in 2012 could be
2 installed at a 5 kW size, thus saving some system costs. Staff recommends that the size of systems
3 installed in 2012 be set at 5 kW. TEP's budget includes \$55,000 in education and monitoring
4 costs. Staff believes the program is beneficial and recommends continuation of the program.
5 However, Staff is recommending a reduction in the 2012 budget for the SVP program to \$350,000,
6 reflecting the smaller size of the installed systems as well as a reduction in educational and
7 monitoring costs.

8 **TEP Derating Chart**

9 12. During consideration of TEP's 2011 REST plan, there was concern with the then-
10 in- effect derating chart used by TEP. A derating chart estimates the reduction in production by a
11 photovoltaic system due to a number of factors including orientation and shading. During the
12 approval process for the 2011 REST plan, TEP agreed to work with the solar industry and any
13 other interested parties to review and possibly modify the derating chart.

14 13. TEP held a stakeholder meeting on March 8, 2011, to discuss the derating chart
15 with interested parties. On May 26, 2011, TEP filed a Notice of Filing Derating Chart. This filing
16 contained a new derating chart and related documentation which TEP indicated was the result of
17 its collaborative efforts with interested parties.

18 14. On June 6, 2011, TEP filed a Notice of Filing Errata – Derate Chart, wherein TEP
19 corrected certain documentation related to the derating chart which it previously filed on May 26,
20 2011. TEP has indicated to Staff that it is not aware of any opposition to this new derating chart.
21 Staff believes it would be appropriate to consider this new derating chart as part of the
22 Commission's overall consideration of TEP's 2012 REST plan. The new derating chart is
23 included in TEP's proposed 2012 REST plan. Given the collaborative process which produced the
24 new derating chart and the lack of any known opposition to its adoption, Staff recommends
25 approval of TEP's new derating chart as part of the Commission's consideration of TEP's 2012
26 REST plan.

27 ...

28 ...

Bright Tucson Solar Buildout Plan

15. In TEP's proposal for its 2011 REST plan, TEP requested approval of a four year build-out plan for the Bright Tucson Community Solar program for 7 MW each year of utility scale and utility-owned generation costs at a total cost of \$112 million or \$28 million per year. Additionally, the Commission approved installation of 3.4 MW of utility-scale and utility-owned renewable generation, consisting of a 1.8 MW expansion of TEP's photovoltaic system at Springerville and a 1.6 MW single axis solar tracker at the Tucson airport. (Decision No. 71640, April 14, 2010).

16. The Bright Tucson program was approved by the Commission in Decision No. 71835 (August 10, 2010). The program allows TEP customers to purchase blocks of renewable energy via an optional tariff rider. Customers would buy one or more 1 kW pieces of renewable energy, each representing 150 kWh per month, at a \$0.02 per kWh premium over the regular tariff rate. Such customers would then have that solar capacity component of their bill fixed for 20 years.

17. The Commission, in Decision No. 72033 (December 10, 2010), declined to approve the proposed four-year buildout program as proposed by TEP, but rather approved it for one year, stating that TEP may seek approval of additional years for the buildout plan as part of Commission consideration of future REST plans. As proposed by TEP in its 2011 and 2012 REST plans, TEP would recover carrying costs, depreciation, operations and maintenance, and property tax costs through the REST surcharge until such time as TEP files its next rate case, when these costs would be considered for inclusion in TEP's rate base. TEP projects annual recovery through the REST surcharge in upcoming years as shown on Table 4 on Page 7 of the Company's application. This involves collection of \$4.2 million in 2012 and \$3.8 million in 2013, with these assets then projected to enter TEP's rate base as part of a 2012 rate proceeding. TEP indicates that at this time it estimates that building costs considered in a projected 2012 rate proceeding would result in and of themselves in an annual rate increase of \$7.66 million. TEP then projects the buildout plan resulting in new recoveries of \$3.5 million in 2014 and \$6.7 million in 2015 through the REST charge as a result of on-going buildout plan costs until such costs would be addressed in the

1 following TEP general rate case. For the 2012 REST plan, the buildout plan costs of \$4.2 million
 2 that TEP is proposing to recover include the line items shown in the following table.

Line Item	2010 and 2011 Buildout Plan Costs
Carrying Costs	\$1,903,686
Book Depreciation	\$2,113,741
Operations and Maintenance	\$151,500
Land Leasing	\$59,000
Total	\$4,227,927

7
 8 18. Other generating investments made by TEP between rate cases do not receive
 9 similar carrying cost and other recovery treatment prior to their inclusion in rate base in TEP's
 10 next rate proceeding. Staff believes that as the renewable energy generation industry matures, it
 11 should receive similar treatment to other generation facilities TEP constructs and then seeks
 12 recovery of in future rate proceedings. Given that the Commission has approved the treatment
 13 requested by TEP in approving the 2010 and 2011 REST plans, Staff believes that a gradual
 14 transition is warranted from providing recovery through the REST surcharge to seeking recovery
 15 through a general rate proceeding.

16 19. Thus, Staff recommends that in regard to the 2012 REST plan budget, TEP be
 17 allowed to recover half of its requested recovery amount, \$2,114,459 through the 2012 REST
 18 surcharge.

19 20. Staff further recommends that in regard to REST plan budgets in 2013 and beyond,
 20 that TEP not be allowed to recover costs from the buildout plan, but rather should seek recovery of
 21 those costs in its next general rate proceeding.

22 21. Staff further recommends that the Commission should approve the buildout
 23 program for 2012 as part of TEP's 2012 REST plan, but, consistent with the Commission's
 24 decision on TEP's 2011 REST plan, approval should not be granted for additional future years.
 25 Rather, TEP should seek approval for future years of the buildout plan as part of the Company's
 26 seeking of Commission approval for future annual REST plans.

27 22. Consistent with the Commission's approval of TEP's 2011 REST plan, Staff further
 28 recommends that reasonableness and prudence of buildout plan costs be examined in TEP's next

1 rate case and that any costs determined to be not reasonable and prudent be refunded by the
2 Company.

3 23. In discussions with TEP, the Company has indicated that some portion of this
4 buildout program is not necessary to serve the Bright Tucson Community Solar program, but that
5 the Company believes that the buildout program should continue at its projected scale to provide
6 some diversity in its renewable portfolio between utility-owned and third party owned renewable
7 generation. Staff believes that this is a reasonable proposal but that it is confusing to title the
8 program the Bright Tucson Solar Buildout program when all these assets are not necessarily
9 related to providing resources for the Bright Tucson Community Solar program. It should be
10 recognized that this buildout program is fundamentally a program to fund utility-scale generation
11 while recognizing that some portion of the assets built will provide resources for the Bright Tucson
12 Community Solar program.

13 **Marketing Costs**

14 24. TEP has typically included a marketing budget in its annual REST plan filings. The
15 approved 2011 REST plan included a budget of \$750,000. For the proposed 2012 REST plan
16 budget, TEP has proposed \$700,000 in funding for marketing. The table below shows a breakout
17 of various forms of marketing and advertising for the proposed 2012 REST plan submitted by
18 TEP.

19 Line Item	TEP Proposed Funding in 2012 REST Plan
20 Television Advertisement	\$250,000
21 Billboard Advertisement	\$150,000
22 Radio Advertisement	\$150,000
23 Sponsorships	\$75,000
Educational	\$50,000
Promotional	\$25,000
Total	\$700,000

24 25. Staff believes that with the significant growth in the renewable energy industry in
25 Arizona in recent years, there are now many venues for publicizing renewable energy technologies
26 and programs, and that the renewable energy industry should bear the primary responsibility for
27 marketing renewable energy in Arizona. Therefore, the need for continued funding of marketing
28 by TEP's ratepayers has declined significantly.

1 26. Thus, Staff is recommending approval of a marketing budget of \$100,000 as part of
2 its 2012 REST plan proposal.

3 27. Staff further recommends that in future REST plans, the burden of proof will be
4 borne by TEP to justify the use of ratepayer funds to pay for marketing if TEP proposes the use of
5 ratepayer funds for marketing in future REST plans.

6 **Labor Costs**

7 28. TEP has a number of employees whose sole function is to work on REST related
8 matters, and the cost of such employees is normally funded as part of the annual REST budget.
9 This includes 11 internal TEP positions, 6 positions with external contractors, and assistance from
10 interns. TEP's labor budget in the approved 2011 REST plan and its proposed 2012 REST plan
11 are shown in the table below.

12 Line Item	Approved 2011 REST Budget	TEP Proposed 2012 REST Budget
13 Internal Labor	\$1,143,950	\$1,185,090
14 External Labor	\$426,050	\$468,769
15 Materials and Supplies	\$75,000	\$75,000
Total	\$1,645,000	\$1,728,859

16 29. It is difficult in a Staff review of a REST plan to assess in a detailed manner the
17 necessary level of labor costs for a utility such as TEP to achieve its requirements under the REST
18 rules. Staff believes that there are likely reasons why additional labor costs could be incurred,
19 such as continued growth in the REST requirements, but also reasons why labor costs may be
20 reduced, such as the small number of commercial DG systems contemplated in TEP's proposed
21 plan. Staff believes that on balance, it would be reasonable to provide the same labor cost to TEP
22 as was provided in the 2011 REST plan, or a total of \$1,645,000.

23 **Research and Development**

24 30. TEP is requesting approval of funding for a number of research and development
25 ("R&D) projects. The projects include on-going testing and studies at TEP's solar test yard,
26 research in coordination with the Electric Power Research Institute ("EPRI") on the integration of
27 distributed renewable energy and a transmission integration study, and a number of projects
28

1 through TEP's partnership with the AZRise Global Institute at the University of Arizona
2 ("AZRise").

3 31. Staff believes that a reduced amount of R&D funding is reasonable to include in the
4 2012 REST plan budget, to balance the need for certain R&D work related to TEP's REST efforts,
5 while reducing the cost on TEP's customers in comparison to past years. TEP's approved 2011
6 R&D budget was \$1,065,000.

7 32. Specifically, Staff believes continued funding for work at the TEP Solar Test Yard
8 is reasonable at a moderately reduced level and continued funding of the AZ Rise work by the
9 University of Arizona is also reasonable. The EPRI Distributed Integration Study is currently
10 underway in 2011 and the 2012 funding would complete this two year study. Staff believes that
11 this study should be funded in 2012 for its second year. Staff believes that the second EPRI study
12 on transmission integration should not be funded in 2012, but TEP could consider pursuing
13 funding for it in future years. TEP's proposed R&D budget for 2012 is \$956,000. Staff's
14 recommended R&D budget for 2012 is \$723,500.

15 33. Proposed Funding for these projects is as shown in the following table:

Project	2012 Company Proposed Funding	2012 Staff Proposed Funding
TEP Solar Test Yard	\$350,000	\$275,000
EPRI Distribution Integration Study	\$191,000	\$191,000
EPRI Transmission Integration Study	\$150,000	\$0
AZRise Research	\$250,000	\$250,000
Dues and Fees	\$15,000	\$7,500
Total	\$956,000	\$723,500

22
23 The Commission agrees with Staff that a reduction to this budget line item is warranted. We are
24 becoming more and more concerned about the appropriateness of including these types of
25 expenses in the REST* surcharge. However, in order to accommodate a transition away from this
26 funding source, we will reduce TEP's requested research and development budget by almost half,
27 leaving \$525,000. We will allow TEP the flexibility to allocate this funding among the various
28

1 projects listed above, provided that TEP shall not increase funding for any project beyond the Staff
2 Proposed Funding levels.¹

3 **Information Technology Costs**

4 34. TEP's proposed 2012 REST plan budget for information technology ("IT") includes
5 a request for \$500,000, up from \$425,000 that was approved in the 2011 REST plan budget. TEP
6 has indicated to Staff that the Company, in 2012, will be in the 2nd year of a major upgrade to its
7 computer systems to track various information related to REST activities. Thus, TEP has stated
8 that this year's requested IT budget is significantly higher than it will be in subsequent years, when
9 TEP has indicated it will be \$100,000 or less annually. Staff believes that it is reasonable to fund
10 TEP's IT budget at \$500,000 to complete work on the system upgrades in the 2012 REST plan
11 budget, recognizing that in future years IT costs for TEP will be much lower, at \$100,000 or less.

12 **Bright Roofs Program**

13 35. TEP's Bright Roofs Program involves the installation of utility-owned large scale
14 solar systems on rooftops throughout the TEP service territory. TEP would work with various
15 entities to lease rooftop space from them to install grid-tied generation facilities of 250 kW or
16 more. TEP has indicated that to date it has been difficult to procure rooftop space for such
17 installations. For example, TEP had targeted schools for such installations, but due to restrictions
18 in the Arizona Revised Statutes, TEP was prevented from pursuing long term leases with the
19 schools in its service territory. TEP is currently working with other prospective sites for
20 installations under the Bright Roofs program.

21 36. TEP's July 1, 2011 filing states that it intends to count installations under the Bright
22 Roofs program as non-residential distributed generation for compliance purposes under the REST
23 rules. Staff does not agree that installations under the Bright Roofs Program should be counted
24 toward non-residential distributed generation requirements. Under R14-2-1805.D of the REST
25 rules, an Affected Utility may meet half of its DG requirements from "non-residential, non-utility
26 applications." Staff believes that installations under the Bright Roofs do not qualify as non-utility
27

28 ¹ It is noteworthy that our Energy Efficiency rules expressly authorize the recovery of research and development but our REST rules do not.

1 applications because under the Bright Roofs Program, the installations are owned by TEP. Thus,
2 Staff recommends that the Commission find that installations under the Bright Roofs Program do
3 not qualify as non-residential DG for purposes of compliance with the REST rules.

4 **Bright Tucson Community Solar Program**

5 37. TEP is not proposing any changes to the Bright Tucson Community Solar Program
6 tariffs. TEP has reported to Staff that in 2011, as of mid-September 2011, customers had signed
7 up for 1,974 blocks of energy, representing 1.974 MW of renewable energy generating capacity.

8 **Maximum Percentage of System Cost Paid Through Utility Rebates**

9 38. In recent years, TEP's REST plans have included a provision that the maximum
10 percentage of system cost for a customer that could be paid through utility rebates would be 60
11 percent. The Commission approved a reduction of this percentage in TEP's 2011 REST plan to
12 the 50 percent level. Staff believes that this should be given further consideration. To the extent
13 the maximum percentage can be reduced without significantly impacting the marketplace, such a
14 reduction could result in the most subsidized projects receiving a moderately lower subsidy. This
15 could result in a net increase in the number of projects completed for the same level of total
16 spending. The Company has indicated it did not anticipate that this reduction in the percentage
17 would impact the amount of incentives paid and that TEP does not oppose such a change. Staff
18 believes that a reduction of this level to 40 percent would represent a further modest change, but
19 would be a step toward more efficiently spending REST funds. Staff recommends reducing the
20 maximum percentage of system cost that could be paid through utility rebates to 40 percent for
21 both residential and commercial projects.

22 **Metering Costs**

23 39. TEP has traditionally included funding in its REST plan budget to pay for TEP-
24 owned meters to monitor actual production from renewable installations under its REST program.
25 For 2012, TEP is proposing a budget of \$227,982 to pay for these meters. Arizona Public Service
26 Company ("APS") does not use such meters and does not have a similar budget line item for these
27 meters. Staff believes that while such meters are beneficial in knowing with more specificity what
28 production is actually taking place from renewable energy installations, these meters are not

1 required for TEP to meet its REST requirements and Staff recommends not providing funding for
2 these meters in the 2012 REST plan budget.

3 **Provision of Funds Specifically for Builder-Related Residential DG Projects**

4 40. At the Commission's October 11, 2011 Staff meeting and through filed comments,
5 parties have expressed an interest in seeing the Commission create a separate amount of residential
6 DG funds specifically for use by new home builders. These builders have indicated that they do
7 not believe that TEP's current residential DG program is workable for them, as their projects
8 typically take more than the 180 days that TEP gives residential DG projects to complete their
9 project in order to receive their rebate. TEP has not had such a program in the past and has not
10 proposed such a program as part of its proposed 2012 REST plan. Given the limited time Staff has
11 had to consider such a proposal, Staff is not proposing the creation of such a program for TEP's
12 2012 REST plan. However, Staff believes that this proposal may have merit and Staff
13 recommends that TEP, as part of its proposed 2013 REST plan that will be filed with the
14 Commission on July 1, 2012, either propose a set-aside fund specifically for builder-related DG or
15 indicate in its filing why it is not recommending such a program.

16 **2012 REST Budget Proposals and DG Incentive Levels**

17 *TEP Proposed Budgets*

18 41. TEP's July 1, 2011 filing contained two budgets, with the only difference in the two
19 budgets being reflected in different amounts of funding for residential DG up-front incentives
20 ("UFIs"). Both budgets reflect a carryover of 2010 REST funds of \$4,875,000. The reason for the
21 differential in the two plans is that the Commission, in Decision No. 72033 which approved TEP's
22 2011 REST plan, required TEP to maintain funding for the residential solar program at the same
23 level it was set for the 2011 plan, \$14,358,111. Decision No. 72033 further stated that the
24 Company could argue to decrease this number in its 2012 REST plan. Because TEP is proposing a
25 reduction in the residential DG UFI per watt in its 2012 REST plan in comparison to its 2011
26 REST plan, maintaining the residential DG UFI budget at the \$14,358,111 level would result in
27 TEP overcomplying with the residential DG requirements in the REST rules for 2012.

28 ...

1 42. Thus, TEP filed one budget totaling \$43,983,326 in spending and \$39,108,326 in
2 cost recovery in 2012, including residential DG UFI funding at a level of \$14,358,111.

3 43. TEP filed a second budget reflecting a lower residential DG UFI funding level that
4 would meet residential DG compliance for 2012 but would not exceed compliance, resulting in a
5 reduction of the residential DG UFI budget from \$14,358,111 to \$12,585,213. Thus, the second
6 budget reflects total spending in 2012 of \$42,210,427 and total costs to be recovered in 2012 of
7 \$37,335,427.

8 *Staff Proposed Budgets*

9 44. As discussed above regarding various budget line items, Staff is proposing to
10 reduce the 2012 REST plan budget requested by TEP. To provide the Commission with a broad
11 range of possible approaches to TEP's proposed 2012 REST plan budget, Staff will present three
12 possible options in this Staff Report. The three options and their differing characteristics are
13 described below.

14 2012 Staff Option 1	14 2012 Staff Option 2	14 2012 Staff Option 3
15 Residential DG UFI Funding of \$14,358,111	15 Residential DG UFI funding of \$7,689,938	15 Residential DG UFI funding of \$7,689,938
16 Commercial DG UFI Funding of \$1,114,510	16 Commercial DG UFI Funding of \$1,114,510	16 No Commercial DG UFI Funding
17 Commercial DG PBI Funding of \$5,972,915	17 Commercial DG PBI Funding of \$5,972,915	17 No Commercial DG PBI Funding Beyond Existing Commitments
19 Proposed Budget of \$35,524,526	19 Proposed Budget of \$28,856,353	19 Proposed Budget of \$27,522,303

20 Note: The approved 2011 budget is \$35,884,324.

21 ...

22 ...

23 ...

24 ...

25 ...

26 ...

27 ...

28 ...

45. The Table below summarizes all of Staff's and the Commission's adjustments to TEP's proposed budgets.

Budget Item	Line	TEP 2012 Proposed Budget	Staff 2012 Proposed Budget	Modified Staff Option 2
TEP Owned Generation		\$4,228,918	\$2,114,459	\$4,228,918
Residential UFI		\$14,358,111	\$14,358,111 (Option 1) \$7,689,938 (Options 2 and 3)	\$5,000,000
Commercial UFI		\$1,114,510	\$1,114,510 (Options 1 and 2) \$0 (Option 3)	\$0
Commercial PBI		\$5,972,915	\$5,972,915 (Options 1 and 2) \$5,753,375 (Option 3)	\$5,753,375
Consumer Education Marketing		\$700,000	\$100,000	\$100,000
Schools Program		\$650,000	\$350,000	\$350,000
TEP Training Costs		\$100,000	\$75,000	\$75,000
Metering		\$227,982	\$0	\$227,982
Total Labor Costs		\$1,728,859	\$1,645,000	\$1,645,000
Solar Test Yard Costs		\$350,000	\$275,000	See Finding of Fact #33
EPRI Research		\$341,000	\$191,000	See Finding of Fact #33
Dues and Fees		\$15,000	\$7,500	See Finding of Fact #33

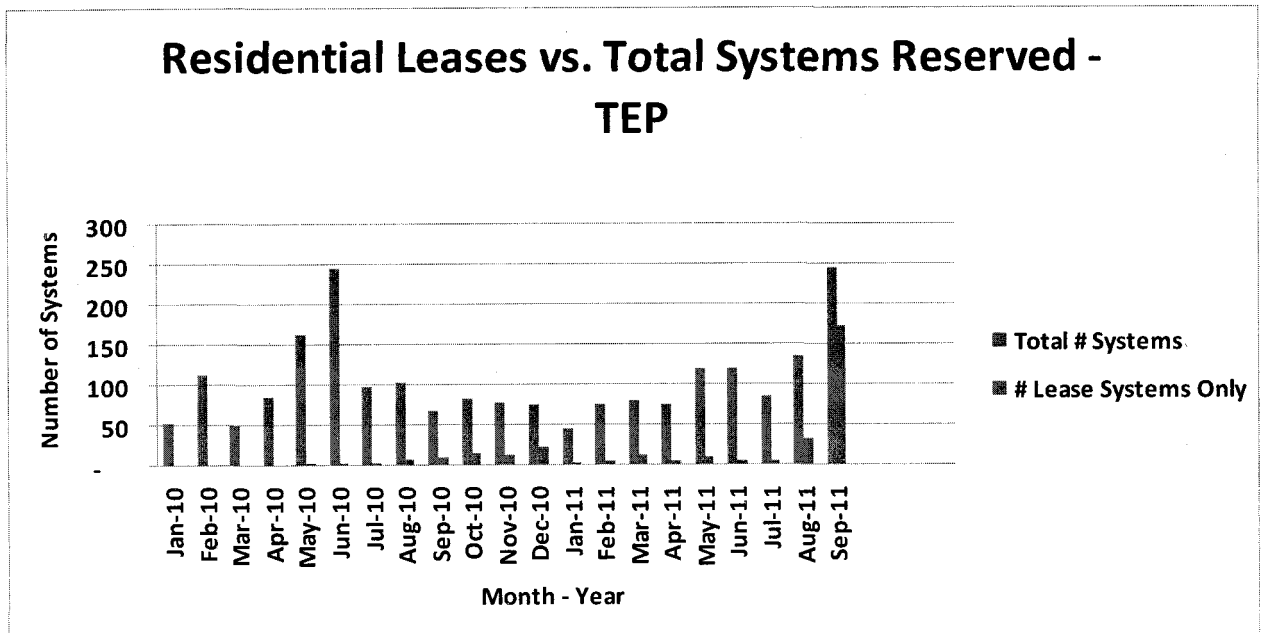
Proposal to Differentiate the Residential DG UFI for Leased and Non-Leased Systems

46. TEP is proposing in its 2012 REST plan to differentiate its residential DG UFI between leased and non-leased systems. In past years, all residential DG systems were eligible for the same level of UFI. TEP's proposal is to provide a UFI to non-leased residential DG systems of \$1.75 per watt and a UFI of \$1.00 per watt for leased systems. TEP has indicated to Staff that it believes that this differentiation is necessary due to various tax and accounting advantages leased systems have that non-leased systems do not have. Absent the proposed differentiation, TEP believes that non-leased systems will not be competitive in the residential DG market. TEP also has noted to Staff that its proposed \$1.00 per watt incentive level for leased systems matches the

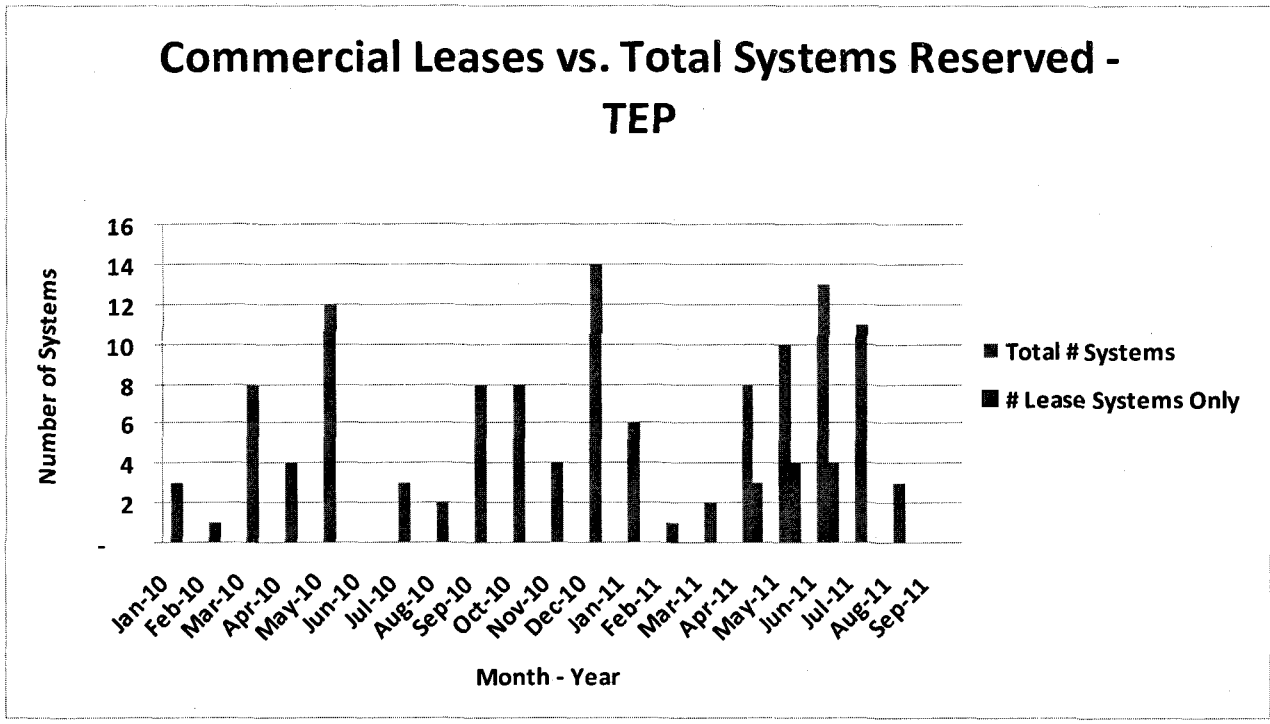
1 current \$1.00 per watt incentive provided by APS under its rapid reservation program, with leased
2 systems making up a high percentage of systems under the APS program.

3 47. Specifically, TEP has reported to Staff that it derived the \$1.00 per watt proposed
4 incentive for leased systems by starting at the \$1.50 per watt proposed incentive for commercial
5 DG systems, given leased systems' perceived similarity to commercial projects. TEP then reduced
6 the incentive level \$0.30 per watt for the estimated impacts of federal tax incentives available to
7 leased systems, \$0.10 per watt for estimated impacts of state tax incentives for leased systems, and
8 \$0.10 per watt for depreciation benefits available to leased systems, resulting in the proposed
9 \$1.00 per watt leased system UFI. TEP further has cited a concern with leasing companies'
10 inflation of value of their system cost to receive higher tax credits based upon fair market value.
11 Leasing companies have disputed certain representations made by TEP regarding the issue of cost,
12 accounting treatment, and tax benefits of leased versus non-leased systems.

13 48. Leased systems had not typically been a significant part of TEP's market until very
14 recently. The graphs below show the number of total and leased systems by month for TEP in
15 2010 and 2011 for the residential and commercial sectors. Both graphs demonstrate the very
16 recent increase of leased systems in TEP's market, particularly in the residential market.



1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28



49. The graphs above demonstrate that leased systems have in very short order become a major factor in the TEP market. In various venues related to this filing, TEP, leasing companies, and other interested parties have made very different representations as to the cost, accounting treatment, and tax benefits of leased systems versus non-leased systems. In the time available to Staff to review TEP's application, Staff has been unable to reconcile the differing representations made by TEP and other parties regarding leased versus non-leased systems.

50. At TEP's October 5, 2011 stakeholder/installer meeting, TEP provided the following comparisons of a non-leased residential DG system with a \$1.75 per watt incentive level, a pre-paid lease system at a \$1.75 per watt incentive level, a conventional lease at a \$1.75 per watt incentive level, and a prepaid lease system at a \$1.00 per watt incentive level.

Budget Elements for a 10.24 kW system	Non-leased System at \$1.75 per watt	Prepaid Lease at \$1.75 per watt	Conventional Lease at \$1.75 per watt	Prepaid Lease at \$1.00 per watt
System Cost	\$50,598	\$50,598	\$50,598	\$50,598
Initial Payment		\$2,802	\$0	\$10,671
TEP Incentive	-\$17,920			
30% Federal Tax Credit	-\$15,179			
Income Tax (25%)	\$4,480			
AZ State Tax Credit	-\$1,000			
Monthly Payment		\$0	\$50	\$0
Early Buy-out (Year 7)		\$1,629	\$4,144	\$1,306
Total Ratepayer Cost	\$20,979	\$4,431	\$8,344	\$11,977
Payback Period	10.9 years	2.3 years	3.2 years	6 years

Note: These examples do not capture the time value of money.

51. Based upon this information, it does appear that leased systems currently have a significant cost advantage over non-leased systems.

52. For purposes of Staff's recommendations, Staff is not proposing to differentiate incentives for residential DG between leased and non-leased systems. The REST rules do not address the treatment of leased versus non-leased systems. Fundamentally, if leased systems can be pursued with a significantly lower incentive level, as TEP's proposed REST plan and other documents indicate, then TEP can do more residential DG systems for less money if a uniform, lower incentive is applied to both leased and non-leased systems. This could result in a lower overall REST budget and lower REST surcharges for TEP's customers.

53. It is also worth noting that long term, if incentive levels continue to drop, they may at some point in the future disappear altogether, at which time there would inherently be no differentiation between incentives for leased and non-leased systems. Thus, if a differential is established, it is possible it will only be effective for some limited period of time into the future until incentives disappear.

...

1 *Commercial DG Compliance and Treatment of Davis-Monthan Air Force Base Project*

2 54. TEP's commercial DG program has been successful in recent years, resulting in the
3 installation of numerous commercial DG systems, including a very large installation at the Davis-
4 Monthan Air Force Base ("Davis-Monthan") in Tucson. TEP's proposed commercial DG budget
5 for 2012, shown in the table below, is significantly smaller than it was in 2011, in large part due to
6 the success of the program in recent years resulting in over compliance by TEP in recent years.

TEP 2012 Proposed Commercial DG Budget	Line Item Budget
Commercial DG UFI	\$1,114,510
Commercial DG PBI – new commitments in 2012	\$219,540
Commercial DG PBI – on-going commitments from past years	\$5,753,375
Total Commercial DG Budget	\$7,087,425

12 55. Most of the commercial DG performance-based incentives ("PBI") budget, for on-
13 going commitments from past years, represent long-term commitments made to PBI projects in
14 past years and would be difficult to adjust in any way. The remaining roughly \$1.3 million in
15 UFIs and commercial DG PBI new commitments, could be eliminated if the Commission were to
16 seek to only provide funds for TEP to reach compliance and not have TEP achieve over-
17 compliance.

18 56. A further complication in assessing compliance and over compliance for TEP's
19 commercial DG program is how the large project at Davis-Monthan is considered. The Davis-
20 Monthan project is a very large DG project that TEP expects to begin operation in 2012, providing
21 25,500,000 kWh per year when fully installed. While the Davis-Monthan project is very large,
22 Staff is not aware of anyone involved in this proceeding who disputes that the Davis-Monthan
23 project qualifies as a commercial DG project under the REST rules. When the Commission
24 considered TEP's 2011 REST plan, a number of parties expressed concern whether such a large
25 project would impact the rest of the commercial DG market, leaving little or no additional
26 commercial DG resources in upcoming years. TEP has proposed some funding for commercial
27 DG in 2012, in part due to uncertainty as to whether the Davis-Monthan project will come to
28 fruition, as the Air Force base still must receive funding from Congress for the project to move

1 forward. In Decision No. 72033, the Commission expressed concern with the impact the Davis-
2 Monthan project could have on the rest of the commercial DG market. Specifically, the
3 Commission found that TEP shall:

4 “notify the Commission as part of all future REST Implementation Plans, whether
5 the inclusion of the Davis-Monthan AFB project in the Company’s commercial DE
6 program has precluded any other non-residential renewable DE systems from
7 receiving utility incentives because Tucson Electric Power Company is already in
8 compliance with its non-residential DE requirements as a result of signing the
9 contract with the Davis-Monthan AFB. If Tucson Electric Power Company finds
10 that commercial DE projects will be or were precluded, the Company should request
11 from the Commission additional funding for the commercial systems that would
12 otherwise be precluded.”

13 57. TEP’s July 1, 2011 filing in this proceeding states that as of the July 1, 2011 filing
14 no projects have specifically been denied due to the Davis-Monthan project, although six
15 commercial projects were unsuccessful in the monthly award allocation process. TEP has
16 indicated to Staff that these six projects were rejected due to being uncompetitively priced in the
17 monthly PBI solicitation process. TEP has further indicated that because Davis-Monthan, a PBI
18 project, has not begun to operate, it has to date taken no PBI funds and all PBI funds have been
19 awarded through TEP’s normal monthly process. Thus, TEP has not proposed any additional
20 commercial DG funding specifically due to the above provision in Decision No. 70233. This
21 representation has been disputed by The Solar Alliance in its August 15, 2011 comments, where it
22 indicates it believes projects have been denied due to the Davis-Monthan project and that
23 additional money should thus be made available. It is difficult for Staff to assess with specificity
24 whether any projects have been denied due to the Davis-Monthan project’s existence. It seems
25 likely that there will be disputes every year between TEP and other interested parties regarding
26 whether any other commercial DG projects were precluded due to the Davis-Monthan project.
27 Thus, Staff believes it would be beneficial for the Commission to make a finding regarding
28 treatment of the Davis-Monthan project in regard to whether, or to what extent, it counts towards
TEP’s commercial DG obligations under the REST rules. Staff believes that it is clear that under
the REST rules, the Davis-Monthan project qualifies as a commercial DG project. Thus Staff
recommends that TEP report the Davis-Monthan project as a commercial DG project for purposes

1 of compliance with the REST rules. To the extent the Commission wishes to fund additional
2 commercial DG projects in light of the size of the Davis-Monahan project, such commercial DG
3 projects can be given funding, while recognizing that under the REST rules, they are likely to
4 result in over compliance by TEP in certain years where the Davis-Monahan project is a major
5 factor.

6 58. A further consideration regarding whether TEP has met compliance or is
7 overcompliant for commercial DG is Section R14-2-1805.E of the REST rules, which states:

8 "An Affected Utility may satisfy no more than 10 percent of its annual Distributed
9 Renewable Energy Requirement from Renewable Energy Credits derived from
10 distributed Renewable Energy Resources that are non-utility owned generators that
11 sell electricity at wholesale to Affected Utilities. This Wholesale Distributed
Generation Component shall qualify for the non-residential portion of the
Distributed Renewable Energy Requirement."

12 59. Thus, 10 percent of the total annual DG requirement, equivalent to 20 percent of the
13 total commercial DG requirement, could be met by such wholesale purchases. To date, TEP has
14 not claimed most of its wholesale distributed generation purchases under this provision, even
15 though it has wholesale purchase contracts that would qualify under this provision. For example,
16 TEP indicates that the 2 MW Amonix project would qualify under this provision and is currently
17 operational, with an annual production estimated at 4,000,000 kWh per year.

18 60. TEP further estimates that an additional 36 MW of such generation will come
19 online, potentially producing 67,800,000 kWh per year. If these wholesale purchases were
20 counted toward TEP's commercial DG requirements, it would result in TEP reaching the 10
21 percent level of all DG requirements and being even more overcompliant with the commercial DG
22 requirements under the REST rules. Staff thus recommends that TEP report the allowable amount
23 of wholesale DG as commercial DG for purposes of compliance with the REST rules. To the
24 extent the Commission wishes to fund additional commercial DG projects in light of the size of the
25 wholesale DG component eligible to be counted as commercial DG, such commercial DG projects
26 can be given funding, while recognizing that under the REST rules, they are likely to result in over
27 compliance by TEP in certain years where the wholesale DG is a major factor.

28 ...

1 61. Against this backdrop of over compliance issues for TEP in the commercial sector,
 2 industry representatives have expressed concern that with the structure of the REST rules, there
 3 may be a significant drop in the amount of DG required in upcoming years. This is fundamentally
 4 a result of the design of the REST rules, where the percentage of DG required grows through 2012,
 5 increasing from 5 percent in 2007 to 30 percent in 2012 and years thereafter. The solar industry
 6 has, in effect, become reliant on the annual 5 percent per year increase in the DG portion of the
 7 REST requirements built into the REST rules through 2012, providing a relatively steady
 8 opportunity for more DG projects each year.

9 62. In comparison, the overall REST requirements increased by 0.25 percent per year
 10 through 2009, by 0.5 percent per year from 2010 to 2015, and by 1.0 percent per year from 2016
 11 through 2025. The solar industry's big concern is that the DG component's percentage of overall
 12 requirements stops growing before the overall REST component starts growing at the 1.0 percent
 13 rate, resulting in a smaller increment of DG requirements from 2013 to 2015. The table below
 14 shows the overall REST requirements by year and the DG requirements by year.

Year	Overall REST Requirement	DG Requirement
2006	1.25%	0
2007	1.50%	5.0%
2008	1.75%	10%
2009	2.0%	15%
2010	2.5%	20%
2011	3.0%	25%
2012	3.5%	30%
2013	4.0%	30%
2014	4.5%	30%
2015	5.0%	30%
2016	6.0%	30%
2017	7.0%	30%
2018	8.0%	30%
2019	9.0%	30%
2020	10.0%	30%
2021	11.0%	30%
2022	12.0%	30%
2023	13.0%	30%
2024	14.0%	30%
After 2024	15.0%	30%

1 63. The September 13, 2011 comments from the Southern Arizona Solar Standards
2 Board (“SASSB”) contains a graph on the front page which illustrates the dip in commercial DG
3 requirements under the REST rules for the 2013 to 2015 period. The next page of the SASSB
4 comments shows a second graph, reflecting a proposal by SASSB to shift some portion of DG
5 requirements further in the future into the 2013-2015 period to at least partially fill in the dip
6 shown for that period. Concerns with not taking action to fill in the 2013-2015 dip include
7 possibly significant declines in installations and industry activity during that period. Staff would
8 note that this issue has existed since the time the REST rules were created and nobody in past
9 years has proposed scaling back the amount of DG in prior years to save some portion of those DG
10 requirements to fill in the 2013-2015 dip.

11 64. Nevertheless, the Commission finds that it is in the public interest to create a
12 mechanism whereby the non-residential DG industry can continue installing DG beyond the
13 amount TEP needs for strict REST rule compliance. Doing so will provide the industry with a
14 mechanism to avoid a decline in industry activity with accompanying layoffs. At the same time,
15 we do not want to exacerbate the 2013-2015 dip. Accordingly, we will not allow the non-
16 residential DG industry activity to grow unchecked in 2012. Rather, we will cap the total amount
17 of reserved non-residential DG capacity at 8 MW. In addition, because TEP is already compliant
18 with its 2012 non-residential DG requirements, new systems must demonstrate exceptional value
19 to ratepayers, and we will reduce the applicable incentives as follows: \$0.55 per watt for non-
20 residential UFI incentives², \$0.072 per kWh for 70-200 kW systems, \$0.068 per kWh for 200-400
21 kW systems, \$0.064 per kWh for 401 kW and higher systems, a UFI of \$0.50 per kWh of 1st year
22 kWh performance and PBI of \$0.057 per kWh for Solar Thermal applications. UFI reservations
23 will be accepted on a first come first serve basis. PBI reservations will be accepted using the
24 reverse auction process with a monthly allocation cap of \$80,000. If the non-residential cap

25 _____
26 ² If residential up-front incentives are reduced below \$0.55 per watt in 2012, then non-residential up-front incentives
27 will be reduced to match the reduced residential incentives at the time each reduction to the residential incentive is
28 made.

1 referenced above is reached, or if the \$3,000,000 PBI Legacy budget is reached, both the UFI and
2 PBI programs will be suspended. Thus, this mechanism will enable the non-residential DG
3 industry to continue installing systems beyond compliance while providing ratepayers with more
4 renewable energy benefit for each dollar invested than might otherwise have occurred. The
5 funding source for this mechanism will be the PBI Legacy Cost budget, which we describe below.

6 The Commission is becoming more and more concerned about the mounting legacy costs
7 associated with PBI systems approved in prior years. These PBI legacy costs for TEP now amount
8 to approximately \$114 million in lifetime commitments. One obvious way to deal with this
9 problem would be to change the incentive for non-residential systems from a performance-based
10 incentive to an up-front incentive. The problem with UFIs, however, is that they are riskier to
11 ratepayers than PBIs. PBIs, unlike UFIs, place the risk of performance on the system owners, not
12 on the ratepayers. One way to maintain the performance-requiring benefits of PBIs yet also
13 address the legacy cost issue associated with PBIs is to collect more money from ratepayers at the
14 time the PBI commitment is made to more closely approximate the lifetime cost of the system,
15 while continuing to pay the system owners based on performance. Accordingly, we will authorize
16 TEP to collect \$3,000,000, which equals more than half of TEP's PBI legacy cost for 2012, and
17 place it in its newly created PBI Legacy Cost budget to be used in future years to pay PBI legacy
18 costs.

19 To the extent that a non-residential system is installed utilizing the PBI Legacy Cost budget
20 and begins generating electricity in 2012, TEP should be allowed to recover its associated lost
21 revenue that is not fuel related. For all kWhs produced by such systems in 2012, TEP shall be
22 authorized to recover from the PBI Legacy Cost budget \$0.07810 per kWh, which equals TEP's
23 fixed cost revenue requirement for its small commercial customers.³

24 65. As noted above, there are a number of different sources TEP may use to meet its
25 commercial DG requirements under the REST rules, including standard UFI and PBI projects,
26 self-direction of funds such as the City of Tucson, the Davis-Monthan project, and wholesale DG.

27 _____
28 ³ TEP will not recover revenues for solar thermal installations because there are no lost revenues associated with such systems.

1 To date, TEP has not fully used all of these sources in meeting its commercial DG needs. The
 2 table below discusses how TEP has accounted for each of these sources in meeting its commercial
 3 DG requirements.

Source of Commercial DG RECs	Treatment to Date for Meeting REST Rule Commercial DG Requirements
Standard Commercial DG UFI Projects	TEP has counted all of these toward the commercial DG requirements
Standard Commercial DG PBI Projects	TEP has counted all of these toward the commercial DG requirements
Self-Directed Projects, Such as the City of Tucson	TEP has counted all of these toward the commercial DG requirements
Davis-Monthan Project	TEP does not plan to count this project toward meeting the commercial DG requirement. As noted above, the Commission, in approving the 2011 REST plan for TEP, required TEP to ask for further commercial DG funds if the Davis-Monthan project resulted in other commercial DG projects being precluded from receiving commercial DG funds, then TEP should file for additional funding.
Wholesale DG	Only a small portion of eligible resources are counted toward TEP's commercial DG requirements, with the balance being counted toward utility-scale requirements under the REST rules

16 66. The table below details the cumulative commercial DG requirement through 2012
 17 and how TEP anticipates meeting the requirement, as being shown in the Company's July 1, 2011
 18 filing for approval of the 2012 REST plan.

Cumulative Commercial DG requirement through 2012	49,845,583 kWh
Existing Commercial DG kWh	46,332,945 kWh
Commercial DG kWh required in 2012	3,512,638 kWh
Commercial DG kWh required in 2012 Met By Small Commercial DG kWh in 2012	1,405,055 kWh (1,124,044 PV, 281,011 solar hot water)
Commercial DG kWh required in 2012 Met By Large Commercial PBI kWh in 2012	1,756,319 kWh
Commercial DG kWh required in 2012 Met By Wholesale DG	351,264 kWh

25 67. The table above reflects only commercial DG used to meet the 2012 REST plan
 26 requirement for commercial DG. The tables below compare the next five years for commercial
 27 DG, with one scenario showing if TEP counted all possible resources toward commercial DG
 28

1 compliance, and the other scenario showing TEP's proposal for considering some but not all
 2 possible resources toward commercial DG compliance; particularly from the Davis-Monthan
 3 project and additional wholesale DG that could be used toward meeting TEP's commercial DG
 4 requirements in 2012 and beyond.

5 Scenario Based Upon TEP Proposal

	2012	2013	2014	2015	2016
6 Overall DG kWh Requirement	99,691,165	116,902,090	133,527,796	150,408,794	182,659,034
7 Non-Residential DG kWh Requirement	49,845,583	58,451,045	66,763,898	75,204,397	91,329,517
8 Existing Non-Residential kWh Prior to 2012	46,332,945	49,845,583	58,451,045	66,763,898	75,204,397
9 Incremental Non-Residential DG Requirement	3,512,638	8,605,462	8,312,853	8,440,499	16,125,120
10 Incremental Non-Residential DG UFI	1,756,319	4,302,731	4,156,427	4,220,249	8,062,560
11 Incremental Non-Residential DG PBI	1,756,319	4,302,731	4,156,427	4,220,249	8,062,560

12 10% Allowed kWh from Wholesale DG per R14.2.805 (Only 10 percent of kWh allowed under this provision is taken under TEP's proposal)	-351,264	-860,546	-831,285	-844,050	-1,612,512
13 Estimated kWh from Davis-Monthan DG Project (0 percent of kWh allowed are taken)	0	0	0	0	0
14 Total Required kWh Non-Residential DG After Adjustments	3,161,374	7,744,916	7,481,568	7,596,449	14,512,608
15 Total Non-Residential UFI DG kWh	1,405,055	3,442,185	3,325,141	3,376,200	6,450,048
16 Total Non-Residential PBI DG kWh	1,756,319	4,302,731	4,156,427	4,220,249	8,062,560

17 Note: The two bottom lines in this table represent how TEP would proposed to allocate the third line up, Total
 18 Required kWh Non-Residential DG After Adjustments, between non-residential UFIs and PBIs.

20 Scenario Counting All Available Resources Toward REST Commercial DG Compliance

	2012	2013	2014	2015	2016
22 Overall DG kWh Requirement	99,691,165	116,902,090	133,527,796	150,408,794	182,659,034
23 Non-Residential DG kWh Requirement	49,845,583	58,451,045	66,763,898	75,204,397	91,329,517
Existing Non-Residential kWh Prior to 2012	46,332,945	46,332,945	46,332,945	46,332,945	46,332,945
24 Incremental Non-Residential DG Requirement	3,512,638	12,118,100	20,430,953	28,871,452	44,996,572
25 10% Allowed kWh from Wholesale DG per R14.2.805 (100 percent of kWh allowed under this provision taken)	-9,969,117	-11,690,209	-13,352,780	-15,040,879	-18,265,903
26 Estimated kWh from Davis-Monthan DG Project (100 percent of kWh allowed are taken)	-12,325,000	-24,650,000	-24,650,000	-24,650,000	-24,650,000

1	Total Required kWh Non-Residential DG After Adjustments	-18,781,479	-24,222,109	-17,571,826	-10,819,427	2,080,669
---	---	-------------	-------------	-------------	-------------	-----------

2 Note: A negative number in the last line, Total Required kWh Non-Residential After Adjustments, indicates the amount of over compliance for that year.

3
4 68. For wholesale DG, TEP has indicated that the 2 MW Amonix project is currently
5 generating an annual production of 4,000,000 kWh with an additional 36 MW of resources
6 potentially coming on line in the near term future.

7 *Staff Proposed 2012 UFI Incentive Levels*

8 69. TEP's initial filing proposed a residential DG UFI of \$1.75 for non-leased systems
9 and \$1.00 for leased systems. TEP is further proposing a commercial UFI of \$1.50 for commercial
10 DG systems. Subsequent to TEP filing its proposed 2012 REST plan, on September 13, 2011,
11 TEP filed a Notice of Suspension of Acceptance of Residential Incentive Applications Under 2011
12 REST Plan or, Alternatively, Request to Modify 2011 REST Plan, in Docket No. E-01933A-10-
13 0266. This was in response to a flood of applications TEP received around the beginning of
14 September 2011, quickly depleting the residential UFI funds. On September 21, 2011, Staff filed a
15 memorandum and proposed order to address TEP's filing. This filing is discussed in more detail
16 in Staff's September 21, 2011 memorandum. Of note though, Staff recommended providing funds
17 for the rest of 2011 at a residential and commercial UFI level of \$0.75 per watt. Staff indicated in
18 that memorandum that one reason to set this lower level of incentive is to test the market to see
19 whether TEP will receive applications for systems at the lower incentive level. The Commission
20 approved Staff's proposal for a lower incentive level, but participation levels will not be known at
21 the lower incentive level for awhile. Staff intends to stay in close communication with TEP
22 regarding participations levels if Staff's proposal is approved by the Commission. Ideally the
23 Commission would have this information to consider what level of UFIs to set for 2012. Thus,
24 Staff is making a proposal in this proceeding, but believes that the Commission may wish to revisit
25 this issue later in 2011, when possible results at the \$0.75 per watt incentive level would be
26 known. Staff would also note that, as discussed earlier in the Staff report, Staff is not proposing
27 separate residential UFI levels for leased and non-leased systems.

28 ...

1 70. On October 28, 2011, TEP notified the Commission that as of Tuesday, October 25,
2 2011 TEP had received enough applications to reserve all of the \$564,500 PV funding at \$0.75 per
3 watt. Accordingly, we believe that rather than the \$1.75 per watt incentive for non-leased systems
4 and \$1.00 per watt incentive for leased systems proposed by TEP on July 1, 2011, the incentive
5 should be set at \$0.75 per watt on January 1, 2012 for all residential UFI systems.

6 71. The trigger mechanism shall work as follows. All PV UFIs will be reduced to
7 \$0.60 per Watt if 25 percent of residential PV incentive funds are reserved on or before March 31,
8 2012. The second trigger would, if 50 percent of the budget is reserved prior to June 30, 2012,
9 reduce the incentive by \$0.20 per Watt if the trigger level is reached within 30 days of the last
10 trigger activation, reduce the incentive by \$0.10 per Watt if the trigger level is reached between 31
11 and 60 days of the last trigger activation, or \$0.05 per Watt if the trigger level is reached between
12 61 and 90 days of the last trigger activation.

13 The third trigger would involve a step-down in the incentive if 75 percent of PV incentive
14 funding is reserved on or before September 30, 2012. The PV incentive would reduce by \$0.20
15 per Watt if the trigger level is reached within 30 days of the last trigger activation, reduce the
16 incentive by \$0.10 per Watt if the trigger level is reached between 31 and 60 days of the last
17 trigger activation, and \$0.05 per Watt if the trigger level is reached between 61 and 90 days of the
18 last trigger activation.

19 If 90 percent of the budget is reserved on or before November 1, 2012, the PV incentive
20 will reduce to \$0.20 per Watt if the existing incentive is greater than \$0.35 per Watt. If the
21 existing incentive is less than or equal to \$0.35 per Watt, the incentive will decline to \$0.10 per
22 Watt.

23 ...
24 ...
25 ...
26 ...
27 ...
28 ...

1 The chart below lays out how the overall trigger mechanism will work.

Date of Trigger	Reservations to Activate Trigger	Rules for Incentive Reductions
On or before March 31, 2012	25%	\$0.60 per watt
On or before June 30, 2012	50%	If the trigger is activated within 30 days of the last trigger activation there will be a \$0.20/Watt incentive decline, 31-60 days a \$0.10/Watt incentive decline, over 60 days a \$0.05/Watt incentive decline
On or before September 30, 2012	75%	If the trigger is activated within 30 days of the last trigger activation there will be a \$0.20/Watt incentive decline, 31-60 days a \$0.10/Watt incentive decline, over 60 days a \$0.05/Watt incentive decline
On or before November 1, 2012	90%	If the existing incentive is greater than \$0.35 per Watt, the incentive will reduce to \$0.20 per Watt. If the existing incentive is less than or equal to \$0.35 per Watt the incentive will decline to \$0.10 per Watt.

24 72. On the day that any trigger is activated, TEP will notify the solar industry by e-mail
 25 and TEP will provide a similar notice on its website. The mechanics of the residential and
 26 commercial triggers would include timely notification to the Commission and installers if the
 27 trigger is reached. As well, Staff recommends that TEP post information on its own website, and
 28

1 on the Arizonagoessolar.org website at least every two weeks, regarding its progress toward
2 reaching the triggers.

3 73. At the Commission's October 11, 2011 Staff Meeting, there was discussion
4 regarding TEP's commitment to providing additional funding at current incentive levels to 75
5 customers even after the approved budget for residential DG was fully depleted. Staff is
6 concerned that such events could occur again in the future. Thus, Staff recommends that TEP not
7 commit to or expend any further ratepayers funds for UFI or PBI incentives once a given year's
8 approved level of funds is depleted, absent approval from the Commission for such action.

9 *2012 REST Plan Overall Budget Options*

10 74. The table below shows proposed spending levels by area for TEP's proposed 2012
11 REST budget options, Staff's proposed 2012 REST budget options 1 and 2, and Modified Staff
12 Option 2.

Budget Components	2012 TEP Option 1	2012 TEP Option 2	2012 Staff Option 1	2012 Staff Option 2	Modified Staff Option 2
<i>Purchased Renewable Energy</i>					
Above market cost of conventional generation	\$12,377,000	\$12,377,000	\$12,377,000	\$12,377,000	\$12,377,000
SunEdison	\$1,045,500	\$1,045,500	\$1,045,500	\$1,045,500	\$1,045,500
TEP Owned	\$4,228,918	\$4,228,918	\$2,114,459	\$2,114,459	\$4,228,918
Subtotal	\$17,651,418	\$17,651,418	\$15,536,959	\$15,536,959	\$17,651,418
<i>Customer Sited Distributed Renewable Energy</i>					
Up-front incentive – residential	\$14,358,111	\$12,585,213	\$14,358,111	\$7,689,938	\$5,000,000
Up-front incentive – commercial	\$1,114,510	\$1,114,510	\$1,114,510	\$1,114,510	\$0
Annual Performance-Based Incentive (PBI)	\$5,972,915	\$5,972,915	\$5,972,915	\$5,972,915	\$5,753,375
Meter Reading	\$19,531	\$19,531	\$19,531	\$19,531	\$19,531
Consumer Education Marketing	\$700,000	\$700,000	\$100,000	\$100,000	\$100,000
Subtotal	\$22,165,067	\$20,392,169	\$21,565,067	\$14,896,894	\$10,872,906
<i>Technical Training</i>					
Schools Program	\$650,000	\$650,000	\$350,000	\$350,000	\$350,000
Internal and Contractor Training	\$100,000	\$100,000	\$75,000	\$75,000	\$75,000
Subtotal	\$750,000	\$750,000	\$425,000	\$425,000	\$425,000

1	<i>Information Systems</i>					
	Subtotal	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000
2	<i>Metering</i>					
	Subtotal	\$227,982	\$227,982	\$0	\$0	\$227,982
3	<i>Labor and Administration</i>					
4	Labor, Materials, Supplies	\$1,728,859	\$1,728,859	\$1,645,000	\$1,645,000	\$1,645,000
5	AZ Solar Website	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000
6	Subtotal	\$1,732,859	\$1,732,859	\$1,649,000	\$1,649,000	\$1,649,000
7	<i>Research and Development</i>					
	Solar test yard	\$350,000	\$350,000	\$275,000	\$275,000	NA
8	AZRISE	\$250,000	\$250,000	\$250,000	\$250,000	NA
	EPRI Research	\$341,000	\$341,000	\$191,000	\$191,000	NA
9	Dues and Fees	\$15,000	\$15,000	\$7,500	\$7,500	NA
10	Subtotal	\$956,000	\$956,000	\$723,500	\$723,500	\$525,000
	PBI Legacy Cost Account					\$3,000,000
11	Total Spending	\$43,983,326	\$42,210,427	\$40,399,526	\$33,731,353	\$34,851,306
12	Carryover 2010 Funds	-\$4,875,000	-\$4,875,000	-\$4,875,000	-\$4,875,000	-\$4,875,000
13	Total Amount for Recovery	\$39,108,326	\$37,335,427	\$35,524,526	\$28,856,353	\$29,976,306

14 Note: TEP projects that \$250,000 will be self-directed by the City of Tucson in 2012. This amount is not reflected in
 15 the budget numbers above, as the money paid in REST charges by the City of Tucson to TEP and then is directed back
 16 to the City of Tucson for renewable projects and thus is not being recovered through the general REST charge.

16 Recovery of Funds Through 2012 REST Charge

17 75. TEP's proposed caps and per kWh charge are designed to recover TEP's proposed
 18 recovery amounts of \$39.1 million and \$37.3 million for the two options provided by TEP. Staff's
 19 proposed caps and per kWh charge are designed to recover Staff's proposed budget of \$35.5
 20 million, \$28.9 million and \$27.5 million for the three options provided by Staff.

21 76. The table below shows the proposed surcharge per kWh for each TEP and Staff
 22 option as well as the proposed caps under each option, in comparison to what is currently in effect
 23 for 2011.

24	2011 Approved	2012 TEP Option 1	2012 TEP Option 2	2012 Staff Option 1	2012 Staff Option 2	2012 Staff Option 3
25	REST Charge (per kWh)	\$0.007121	\$0.007914	\$0.007578	\$0.008051	\$0.006875
26						
27	<i>Class Caps</i>					
	Residential	\$4.50	\$5.00	\$4.75	\$4.00	\$3.00
28	Small	\$160.00	\$178.00	\$170.00	\$150.00	\$125.00

Commercial						
Large Commercial	\$1,000.00	\$1,110.00	\$1,060.00	\$950.00	\$800.00	\$750.00
Industrial and Mining	\$5,500.00	\$6,130.00	\$5,810.00	\$6,500.00	\$5,500.00	\$5,500.00
Public Authority	\$180.00	\$200.00	\$190.00	\$170.00	\$135.00	\$130.00
Lighting	\$160.00	\$178.00	\$170.00	\$150.00	\$125.00	\$120.00

77. The cost recovery by customer class for the approved 2011 REST plan and estimates for the TEP and Staff options for the 2012 REST plan are shown in the table below.

	2011 REST Plan	2012 TEP Option 1	2012 TEP Option 2	2012 Staff Option 1	2012 Staff Option 2	2012 Staff Option 3
Residential	\$15,905,157 (44.3%)	\$17,621,223 (45.1%)	\$16,804,258 (45.0%)	\$14,894,973 (41.9%)	\$11,393,721 (39.5%)	\$10,558,881 (38.4%)
Small Commercial	\$10,441,814 (29.1%)	\$11,670,521 (29.8%)	\$10,944,134 (28.8%)	\$11,238,111 (31.6%)	\$9,532,947 (33.0%)	\$9,286,637 (33.7%)
Large Commercial	\$6,781,882 (18.9%)	\$6,147,200 (15.7%)	\$5,876,975 (15.7%)	\$5,622,078 (15.8%)	\$4,758,361 (16.5%)	\$4,529,191 (16.5%)
Industrial and Mining	\$1,793,166 (5.0%)	\$2,575,100 (6.6%)	\$2,440,377 (6.5%)	\$2,731,826 (7.7%)	\$2,311,308 (8.0%)	\$2,311,849 (8.4%)
Public Authority	\$729,519 (2.0%)	\$826,753 (2.1%)	\$788,432 (2.1%)	\$763,968 (2.2%)	\$626,566 (2.2%)	\$607,812 (2.2%)
Lighting	\$232,786 (0.7%)	\$270,000 (0.7%)	\$258,555 (0.7%)	\$273,682 (0.8%)	\$233,554 (0.8%)	\$228,620 (0.8%)
Total	\$35,884,324	\$39,110,797	\$37,335,477	\$35,524,639	\$28,856,457	\$27,522,498

Note: The amount shown for 2011 for the industrial/mining class is that which was provided by TEP to Staff during review of TEP's 2011 REST plan. TEP subsequently discovered that this number did not accurately reflect all the meters billed in this category, as there are multiple billed meters for some customers in this class. The amount of the error in the 2011 estimate is approximately \$1,056,000. Thus, the 2011 number is lower than it should have been. This correction does not result in any changes in what any customers were billed, just in how it was shown in the documents provided by TEP during the Commission's review of the 2011 REST plan.

...

...

...

...

...

...

...

1 78. For comparison purposes, the table below shows the projected MWH sales by
2 customer class for 2012.

Customer Class	2012 Projected Sales (MWH)
Residential	3,926,054 (37.4%)
Small Commercial	2,022,442 (19.2%)
Large Commercial	2,275,501 (21.7%)
Industrial and Mining	2,041,072 (19.4%)
Public Authority	211,163 (2.0%)
Lighting	33,177 (0.3%)
Total	10,509,408

3
4
5
6
7
8
9 79. The table below shows the contribution, per kWh consumed, for each customer
10 class (projected class cost recovery divided by projected class kWh sales). The table thus provides
11 a comparison of the relative contribution to REST funding by each customer class on a per kWh
12 basis. Staff's proposal for class caps and the per kWh charge is intended to gradually move the
13 customer classes closer to one another in terms of their contribution per kWh consumed in each
14 customer class.

Contribution by Customer Class (per kWh)	2011 REST Plan (per kWh)	2012 TEP Option 1 (per kWh)	2012 TEP Option 2 (per kWh)	2012 Staff Option 1 (per kWh)	2012 Staff Option 2 (per kWh)	2012 Staff Option 3 (per kWh)
Residential	\$0.0041	\$0.0046	\$0.0044	\$0.0039	\$0.0030	\$0.0027
Small Commercial	\$0.0059	\$0.0057	\$0.0057	\$0.0055	\$0.0046	\$0.0045
Large Commercial	\$0.0035	\$0.0049	\$0.0047	\$0.0045	\$0.0038	\$0.0036
Industrial/ Mining	\$0.0009	\$0.0012	\$0.0012	\$0.0013	\$0.0011	\$0.0011
Public Authority	\$0.0035	\$0.0039	\$0.0038	\$0.0036	\$0.0030	\$0.0029
Lighting	\$0.0070	\$0.0078	\$0.0075	\$0.0079	\$0.0068	\$0.0066

15
16
17
18
19
20 80. The table below shows the average REST charge by customer class as well as the
21 percentage of customers at the cap for each customer class.

	2011 REST Plan	2012 TEP Option 1	2012 TEP Option 2	2012 Staff Option 1	2012 Staff Option 2	2012 Staff Option 3
Residential - Average Bill	\$3.59	\$3.97	\$3.78	\$3.35	\$2.57	\$2.38
Small Commercial - Average Bill	\$24.16	\$26.38	\$25.72	\$25.88	\$21.95	\$21.39
Large Commercial - Average Bill	\$897.30	\$823.36	\$787.17	\$753.02	\$637.34	\$606.64
Industrial and Mining - Average Bill	\$4,886.00	\$5,975	\$5,662	\$6,338	\$5,363	\$5,364
Public Authority - Average Bill	\$55.24	\$62.11	\$59.23	\$57.39	\$47.07	\$45.66
Lighting -	\$10.76	\$12.67	\$12.13	\$12.84	\$10.96	\$10.73

1	Average Bill						
2	Residential – Percent at Cap	42.8%	41.6%	41.7%	71.8%	71.8%	71.8%
3	Small Commercial – Percent at Cap	4.8%	4.7%	4.7%	4.7%	4.7%	4.7%
4	Large Commercial – Percent at Cap	70.0%	44.3%	44.3%	50.3%	52.3%	54.1%
5	Industrial and Mining – Percent at Cap	81.7%	98.6%	98.6%	98.6%	98.6%	98.6%
6	Public Authority – Percent at Cap	15.4%	16.1%	16.3%	18.6%	19.7%	19.7%
7	Lighting – Percent at Cap	0.1%	0.1%	0.1%	0.2%	0.2%	0.2%

8 81. Estimated customer bill impacts for various monthly consumptions are shown in the
9 table below.

11	Customer Types	kWh / mo.	2011 REST Plan	2012 TEP Option 1	2012 TEP Option 2	2012 Staff Option 1	2012 Staff Option 2	2012 Staff Option 3
12	Residence Consuming 400 kWh	400	\$2.85	\$3.17	\$3.03	\$3.22	\$2.75	\$2.69
13	Residence Consuming 869 kWh	869	\$3.59	\$5.00	\$4.75	\$4.00	\$3.00	\$2.75
14	Residence Consuming 2,000 kWh	2,000	\$4.50	\$5.00	\$4.75	\$4.00	\$3.00	\$2.75
15	Dentist Office	2,000	\$14.24	\$15.83	\$15.16	\$16.10	\$13.75	\$13.47
15	Hairstylist	3,900	\$27.77	\$30.86	\$29.56	\$31.40	\$26.81	\$26.26
16	Department Store	170,000	\$160.00	\$178.00	\$170.00	\$150.00	\$125.00	\$120.00
16	Mall	1,627,100	\$1,000.00	\$1,110.00	\$1,060.00	\$950.00	\$800.00	\$750.00
17	Retail Video Store	14,400	\$102.54	\$113.95	\$109.13	\$115.93	\$98.99	\$96.95
17	Large Hotel	1,067,100	\$1,000.00	\$1,110.00	\$1,060.00	\$950.00	\$800.00	\$750.00
18	Large Building Supply	346,500	\$1,000.00	\$1,110.00	\$1,060.00	\$950.00	\$800.00	\$750.00
18	Hotel/Motel	27,960	\$160.00	\$178.00	\$170.00	\$150.00	\$125.00	\$120.00
19	Fast Food	60,160	\$160.00	\$178.00	\$170.00	\$150.00	\$125.00	\$120.00
20	Large High Rise Office Bldg	1,476,100	\$1,000.00	\$1,110.00	\$1,060.00	\$950.00	\$800.00	\$750.00
20	Hospital (< 3 MW)	1,509,600	\$1,000.00	\$1,110.00	\$1,060.00	\$950.00	\$800.00	\$750.00
21	Supermarket	233,600	\$1,000.00	\$1,110.00	\$1,060.00	\$950.00	\$800.00	\$750.00
21	Convenience Store	20,160	\$143.56	\$159.54	\$152.78	\$150.00	\$125.00	\$120.00
22	Hospital (> 3 MW)	2,700,000	\$5,500.00	\$6,130.00	\$5,810.00	\$6,500.00	\$5,500.00	\$5,500.00
22	Copper Mine	72,000,000	\$5,500.00	\$6,130.00	\$5,810.00	\$6,500.00	\$5,500.00	\$5,500.00

23
24 82. Staff recommends approval of the proposed Staff Option 2. Staff believes that this
25 recommendation provides adequate funding to more efficiently achieve TEP's 2012 REST goals
26 and even exceed its commercial DG requirement. Staff is cognizant of TEP's uncertainty as to
27 whether the Davis-Monthan project will occur and thus recognizes that for 2012, some level of
28 funding for commercial DG would help ensure that TEP meets its REST requirements even if

1 Davis-Monthan does not move forward with its project. It seems likely that the fate of the Davis-
 2 Monthan project will be known by the time the Commission considers TEP's 2013 REST plan
 3 next year and can take into account the Davis-Monthan project more fully at that time. Staff
 4 Option 2 also provides a reduction in the budget both from the 2011 approved REST plan budget
 5 and TEP's proposals for the 2012 REST plan budget. Staff recognizes that the Commission could
 6 select Staff Option 3 and still expect to meet the commercial DG requirement for 2012, but Staff
 7 believes there is value to providing some level of funding for commercial DG projects,
 8 recognizing that during next year's consideration of TEP's 2013 REST plan, there is likely to be
 9 further consideration of the dip in new incremental DG required in 2013-2015 as well as
 10 commercial DG over compliance.

11 83. The Commission adopts the Modified Staff Option 2 budget. The requisite
 12 surcharge and customer caps to recover a budget of \$29,976,306 are as follows:

13 Customer Class	2011 Customer Caps	2012 Customer Caps
14 Residential	\$4.50	\$3.15
15 Small Commercial	\$160.00	\$130.00
16 Large Commercial	\$1,000.00	\$810.00
17 Industrial & Mining	\$5,500.00	\$5,500.00
18 Public Authority	\$180.00	\$140.00
19 Lighting (PSHL)	\$160.00	\$130.00
20 Per kWh to all Classes	\$0.007121	\$0.007182

21 ...

22 ...

23 ...

1 **Staff's Concerns About REST Plan Formats**

2 84. The Staff is concerned that the REST Implementation Plans and REST Compliance
3 Reports are so diverse in format and content that it is difficult, if not impossible, for Staff and the
4 Commissioners to compare the programs and results from one utility to another. Staff believes
5 that, by developing a standardized template format for both the Implementation Plans and
6 Compliance Reports, the Staff, Commissioners, industry stakeholders and the general public will
7 better be able to consider and compare the plans and performance of all Arizona utilities subject to
8 the REST Rules.

9 85. In order for the public and the Commission to better understand the Utility Plans
10 and Compliance Reports, Staff believes that the utilities should work cooperatively to develop a
11 template for detailed spreadsheets that viewers can download and work with to explore alternative
12 scenarios. The detailed spreadsheets shall be in native format, including the assumptions used by
13 the utilities and the data to support the utility calculations. Care must be taken to protect
14 competitively confidential information, so that information would be blacked out in the public
15 version.

16 86. Staff recommends that the Commission order Tucson Electric Power Company to
17 work with Arizona Public Service Company to jointly lead an effort to establish a REST Format
18 Working Group that would meet periodically with all other utility representatives to develop
19 standardized template formats for both REST Implementation Plans and REST Compliance
20 Reports. Staff recognizes that each utility is unique in a number of ways, so Staff suggests that
21 templates have two parts: mandatory information and optional/other information. The first part
22 would be detailed and identical in format. The second part would be an optional portion with a
23 flexible format that would vary by utility. The Working Group would solicit input, suggestions,
24 and detailed recommendations for stakeholders and the general public. In addition to developing
25 the templates of Implementation Plans and Compliance Reports, the Working Group would
26 develop templates for detailed spreadsheets that would be made available to the public on both the
27 utility website and the ArizonaGoesSolar.org website.

28 ...

1 87. The Working Group would submit to the Commission a report with its
2 recommendations no later than September 1, 2012, for Staff approval. The effective date for usage
3 of the templates would be April 1, 2013, for the 2012 Compliance Reports and July 1, 2013, for
4 the 2014 REST Implementation Plans.

5 88. We believe the Working Group should also include renewable industry and
6 stakeholder representatives.

7 **Staff Recommendations**

8 89. Staff has recommended that the Commission approve the Staff proposed Option 2
9 for the 2012 REST plan, reflecting a REST charge of \$0.006875 per kWh, and related caps
10 reflected in the Staff proposal. This includes total spending of \$33,731,353 and a total budget of
11 \$28,857,434.

12 90. Staff has further recommended that the residential PV Up-Front Incentive be set at
13 \$1.00 per watt on January 1, 2012.

14 91. Staff has further recommended that the non-residential Up-Front Incentive be set at
15 \$1.00 per watt.

16 92. Staff has further recommended that the upper limit for non-residential Production
17 Based Incentives be set at \$0.125 per kWh for 70-200 kW systems, \$0.105 per kWh for 201-400
18 kW systems and \$0.091 per kWh for 401 kW or higher systems.

19 93. Staff has further recommended approval of the trigger mechanisms for reducing DG
20 incentives as proposed by Staff, with trigger dates of June 30, 2012 (45 percent) September 30,
21 2012 (70 percent) and November 30, 2012 (90 percent). Incentive levels would then be set at
22 \$0.85 per watt after the first trigger occurs, \$0.70 per watt after the second trigger occurs, and
23 \$0.50 per watt after the third trigger occurs.

24 94. Staff has further recommended approval of TEP's new derating chart.

25 95. Staff has further recommended that in regard to the Bright Tucson Buildout Plan in
26 the 2012 REST plan budget, TEP be allowed to recover half of its requested recovery amount,
27 \$2,114,459, through the 2012 REST surcharge.

28 ...

1 96. Staff has further recommended that in regard to REST plan budgets in 2013 and
2 beyond, that TEP not be allowed to recover costs from the Bright Tucson Buildout Plan, but rather
3 should seek recovery of those costs in the next general rate proceeding.

4 97. Staff has further recommended that the Commission approve the buildout program
5 for 2012 as part of TEP's 2012 REST plan, but, consistent with the Commission's decision on
6 TEP's 2011 REST plan, approval should not be granted for additional future years. Rather, TEP
7 should seek approval for further years of the buildout plan as part of the Company's seeking of
8 Commission approval for future annual REST plans.

9 98. Staff has further recommended that reasonableness and prudence of buildout plan
10 costs be examined in TEP's next rate case and that any costs determined not to be reasonable and
11 prudent be refunded by the Company.

12 99. Staff has further recommended that in future REST plans, the burden of proof will
13 be borne by TEP to justify the use of ratepayer funds to pay for marketing if TEP proposes to use
14 ratepayer funds for marketing in future REST plans.

15 100. Staff further recommends approval of TEP's proposed research and development
16 projects and funding as discussed herein.

17 101. Staff has further recommended that the Commission find that installations under the
18 Bright Roofs Program do not qualify as non-residential DG for purposes of compliance with the
19 REST rules.

20 102. Staff has further recommended reducing the maximum percentage of a project that
21 can be paid for with utility incentives to 40 percent. We disagree, however, and will keep in place
22 the current limit that allowed UFI incentives to cover up to 50 percent of total system costs.

23 103. Staff has further recommended that TEP, as part of its proposed 2013 REST plan
24 that will be filed with the Commission on July 1, 2012, either propose a set-aside fund specifically
25 for builder-related DG or indicate in its filing why it is not recommending such a program.

26 104. Staff has further recommended that the Commission not differentiate between
27 leased and non-leased systems in setting DG UFIs for TEP's 2012 REST plan.

28 ...

1 105. Staff has further recommended that TEP report the Davis-Monthan project as a
2 commercial DG project for purposes of compliance with the REST rules.

3 106. Staff has further recommended that TEP report the total allowable amount of
4 wholesale DG as commercial DG for purposes of compliance with the REST rules.

5 107. Staff has further recommended that TEP post information on its own website, and
6 on the Arizonagoessolar.org website at least every two weeks, regarding its progress toward
7 reaching the triggers.

8 108. Staff has further recommended approval of the School Vocational Program, as
9 discussed herein.

10 109. Staff has further recommended that TEP not commit to or expend any further
11 ratepayers funds for UFI or PBI incentives once a given year's approved level of funds is depleted,
12 absent approval from the Commission for such action.

13 110. Staff has further recommended approval of the formation of the REST Format
14 Working Group as discussed herein. TEP and other utilities would submit the Working Group's
15 report and recommendations by September 1, 2012, for Staff approval

16 111. We believe that customers who benefit, from the effective date of this Decision, by
17 receiving incentives under the REST rules should provide an equitable contribution to future
18 REST benefits for other customers. We will therefore require that residential, small commercial,
19 large commercial and industrial customers who receive incentives under the REST rules pay a
20 monthly REST charge equal to the amount they would have paid without the renewable
21 installation. This payment shall begin when TEP reprograms its billing system to accomplish this,
22 or with the October 2012 billing, whichever is sooner. This requirement shall only apply to
23 renewable systems installed after January 1, 2012.

24 112. Staff has further recommended that TEP file the REST-TS1, consistent with the
25 Decision in this case, within 15 days of the effective date of the Decision.

26 113. On November 2, 2011, TEP filed Exceptions to Staff's proposed order and certain
27 Staff recommendations therein. TEP's Exceptions requested that the Commission amend the Staff
28 recommendations regarding: 1. The recovery of certain costs for the TEP Bright Tucson Buildout

1 Plan through the REST surcharge; 2. The recovery of certain metering costs through the REST
2 surcharge; 3. The level of UFIs for residential and commercial PV projects; 4. The level of
3 marketing costs to be recovered through the REST surcharge; and 5. The proposed treatment of
4 TEP's Bright Roofs Program with respect to compliance with the Commission's REST Rules. As
5 part of its Exceptions, TEP also submitted a revised budget that reflected its requested
6 amendments as well as revised REST surcharges and monthly bill caps.

7 114. We agree with TEP's first, second and fifth Exceptions relating to cost recovery for
8 its Bright Tucson Buildout Plan, recovery of metering costs, and Bright Roofs Program
9 compliance with the REST rules, but disagree with its Exceptions relating to the level of UFIs for
10 the residential and commercial PV projects and the level of marketing costs to be recovered
11 through the REST surcharge. We believe the UFI incentive should be set as we have laid out in
12 this Order. We also do not believe that TEP's marketing expenses should be increased. We agree
13 with Staff and believe that marketing renewable energy is the responsibility of the renewable
14 energy industry. Accordingly, we will reduce TEP's marketing budget to \$100,000 and rename
15 that budget as "Consumer Education."

16 CONCLUSIONS OF LAW

17 1. TEP is an Arizona public service corporation within the meaning of Article XV,
18 Section 2, of the Arizona Constitution.

19 2. The Commission has jurisdiction over TEP and over the subject matter of the
20 application.

21 3. The Commission, having reviewed the application and Staff's Memorandum dated
22 October 25, 2011, concludes that it is in the public interest to approve the TEP 2012 Renewable
23 Energy Standard and Tariff Implementation Plan as discussed herein.

24 ORDER

25 IT IS THEREFORE ORDERED that the Modified Staff Option 2 for the Tucson Electric
26 Power Company 2012 REST Implementation Plan, reflecting a REST charge of \$0.007182 per
27 kWh, and related caps reflected in the Modified Staff proposal be and hereby is approved. This
28 includes total spending of \$34,851,306 and a total budget of \$29,976,306.

1 IT IS FURTHER ORDERED that the residential PV Up-Front Incentive be set at \$0.75 per
2 watt on January 1, 2012.

3 IT IS FURTHER ORDERED that the non-residential Up-Front Incentive be set at \$0.55
4 per watt.

5 IT IS FURTHER ORDERED that the upper limit for non-residential Production Based
6 Incentives be set at \$0.072 per kWh for 70-200 kW systems, \$0.068 per kWh for 201-400 kW
7 systems and \$0.064 per kWh for 401 kW or higher systems.

8 115. IT IS FURTHER ORDERED that for residential DG, the UFI be reduced according
9 to the trigger mechanism described in Finding of Fact Number 71.

10 IT IS FURTHER ORDERED that Tucson Electric Power Company post information on its
11 own website, and on the Arizonagoessolar.org website at least every two weeks, regarding its
12 progress toward reaching the triggers.

13 IT IS FURTHER ORDERED that Tucson Electric Power Company's new derating chart be
14 and hereby is approved.

15 IT IS FURTHER ORDERED that in regard to the Bright Tucson Buildout Plan in the 2012
16 REST plan budget, Tucson Electric Power Company is allowed to recover \$4,228,918 through the
17 2012 REST surcharge.

18 IT IS FURTHER ORDERED that Tucson Electric Power Company's Buildout Program as
19 set forth in its 2012 REST Plan be and hereby is approved, but that approval shall not be granted
20 for future years except for the two consecutive years (2012 and 2013) of investment that will allow
21 Tucson Electric Power Company to acquire the planned solar thermal steam augmentation to the
22 Sundt Generating Station. Tucson Electric Power Company may seek approval for further years of
23 the buildout plan as part of Tucson Electric Power Company's seeking of Commission approval
24 for future annual REST plans.

25 IT IS FURTHER ORDERED that reasonableness and prudence of buildout plan costs be
26 examined in Tucson Electric Power Company's next rate case and that any costs determined not to
27 be reasonable and prudent be refunded by Tucson Electric Power Company.

28 ...

1 IT IS FURTHER ORDERED that in future REST plans, the burden of proof will be borne
2 by Tucson Electric Power Company to justify the use of ratepayer funds to pay for marketing if
3 Tucson Electric Power Company proposes to use ratepayer funds for marketing in future REST
4 plans.

5 IT IS FURTHER ORDERED that Tucson Electric Power Company is allowed to recover
6 \$227,982 in metering costs through the 2012 REST surcharge.

7 IT IS FURTHER ORDERED that Tucson Electric Power Company's proposed research
8 and development projects and funding be and hereby is approved at a level of \$525,000 for 2012
9 as discussed herein.

10 IT IS FURTHER ORDERED that the maximum percentage of a project that can be paid
11 for with utility UFI incentives is 50 percent.

12 IT IS FURTHER ORDERED that Tucson Electric Power Company, as part of its proposed
13 2013 REST plan that will be filed with the Commission on July 1, 2012, either propose a set-aside
14 fund specifically for builder-related DG or indicate in its filing why it is not recommending such a
15 program.

16 IT IS FURTHER ORDERED that the Commission not differentiate between leased and
17 non-leased systems in setting DG UFIs for Tucson Electric Power Company's 2012 REST plan.

18 IT IS FURTHER ORDERED that Tucson Electric Power Company report the Davis-
19 Monthan project as a commercial DG project for purposes of compliance with the REST rules.

20 IT IS FURTHER ORDERED that Tucson Electric Power Company report the total
21 allowable amount of wholesale DG as commercial DG for purposes of compliance with the REST
22 rules.

23 IT IS FURTHER ORDERED that the School Vocational Program be and hereby is
24 approved, as discussed herein.

25 IT IS FURTHER ORDERED that Tucson Electric Power Company not commit to or
26 expend any further ratepayers funds for UFI or PBI incentives once a given year's approved level
27 of funds is depleted, absent approval from the Commission for such action.

28 . . .

1 IT IS FURTHER ORDERED that the formation of the REST Format Working Group be
2 and hereby is approved as discussed herein. Tucson Electric Power Company shall submit the
3 Working Group's report and recommendations by September 1, 2012, for Staff approval.

4 IT IS FURTHER ORDERED that residential, small commercial, large commercial and
5 industrial customers who receive incentives, from the effective date of this Decision, under the
6 REST rules will pay a monthly REST charge equal to the amount they would have paid without
7 the renewable installation. This payment shall begin when TEP reprograms its billing system to
8 accomplish this, or with the October 2012 billing, whichever is sooner.

9 ...

10 ...

11 ...

12 ...

13 ...

14 ...

15 ...

16 ...

17 ...

18 ...

19 ...

20 ...

21 ...

22 ...

23 ...

24 ...

25 ...

26 ...

27 ...

28 ...

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28

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

IT IS FURTHER ORDERED that this Decision become effective immediately.

BY THE ORDER OF THE ARIZONA CORPORATION COMMISSION

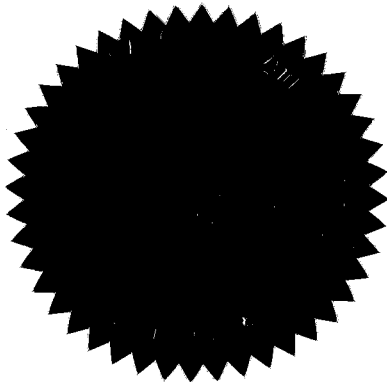

CHAIRMAN


COMMISSIONER

COMMISSIONER

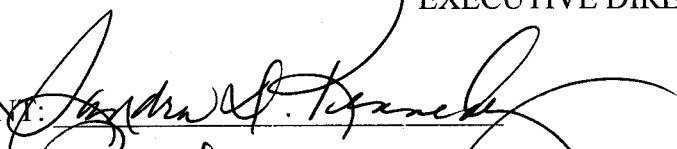
COMMISSIONER

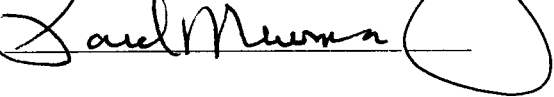

COMMISSIONER



IN WITNESS WHEREOF, I, ERNEST G. JOHNSON, 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 13th day of JANUARY, 2012


ERNEST G. JOHNSON
EXECUTIVE DIRECTOR

DISSENT: 

DISSENT: 

SMO:RGG:lh\RM

1 SERVICE LIST FOR: Tucson Electric Power Company
2 DOCKET NO. E-01933A-11-0209

3 Mr. Kevin Koch
4 2333 East First Street
5 Tucson, Arizona 85719

Ms. Janice M. Alward
Chief Counsel, Legal Division
Arizona Corporation Commission
1200 West Washington Street
Phoenix, Arizona 85007

6 Mr. Timothy Hogan
7 202 East McDowell Road, Suite 153
8 Phoenix, Arizona 85004

9 Mr. Daniel Pozefsky
10 Chief Counsel
11 1110 West Washington
12 Phoenix, Arizona 85007

13 Mr. C. Webb Crockett
14 3003 North Central Avenue, Suite 2600
15 Phoenix, Arizona 85012-2913

16 Mr. Court Rich
17 6613 North Scottsdale Road, Suite 200
18 Scottsdale, Arizona 85250

19 Mr. Scott Wakefield
20 201 North Central Avenue, Suite 3300
21 Phoenix, Arizona 85004-1052

22 Mr. Philip Dion
23 Unisource Energy Corporation
24 One South Church Avenue, Suite 200
25 Tucson, Arizona 85701

26 Mr. Michael Patten
27 Roshka, DeWulf & Patten, PLC
28 One Arizona Center
400 East Van Buren Street, Suite 800
Phoenix, Arizona 85004

Mr. Steven M. Olea
Director, Utilities Division
Arizona Corporation Commission
1200 West Washington Street
Phoenix, Arizona 85007

COMMISSIONERS
 GARY PIERCE - Chairman
 BOB STUMP
 SANDRA D. KENNEDY
 PAUL NEWMAN
 BRENDA BURNS



ARIZONA CORPORATION COMMISSION

SANDRA D. KENNEDY
 COMMISSIONER

Direct Line: (602) 542-3625
 Fax: (602) 542-3669
 E-mail: skennedy@azcc.gov

January 4, 2012

ARIZONA CORPORATION COMMISSION
 DOCKET CONTROL
 (E-01993A11-0269)

RE: DISSENT TEP 2012 REST IMPLEMENTATION PLAN

I AM DOCKETING THIS DISSENT TO SUMMARIZE THE REASONS FOR MY DECEMBER 20, 2011 "NO" VOTE ON THE TUCSON ELECTRIC POWER COMPANY'S (TEP) 2012 REST IMPLEMENTATION PLAN.

FIRST, CONTRARY TO A COMMENT MADE DURING THE OPEN MEETING RELATING TO AN ALLEGED MOTIVE FOR MY "NO" VOTE, THIS DISSENT MAKES CLEAR THAT MY "NO" REFLECTS MY CONCERNS WITH SEVERAL AMENDMENTS ADOPTED BY THE COMMISSION IN ITS FINAL ORDER, AND NOT MY SO-CALLED DESIRE TO INCREASE THE REST SURCHARGE. AS A LONG-TIME SUPPORTER OF RENEWABLE ENERGY IN THIS STATE, I WANT THE BEST "BANG FOR THE RATEPAYERS' BUCK" WHEN IT COMES TO RENEWABLE ENERGY RESOURCES FOR CUSTOMERS. I WILL ALWAYS LOOK FOR COST EFFICIENT WAYS TO GET MORE MW OF RENEWABLE ENERGY WHILE PROVIDING ALTERNATIVE OPTIONS FOR THE RATEPAYERS. DUE TO THE ADOPTION OF CERTAIN AMENDMENTS, I AM CONCERNED THAT THE COMMISSION'S FINAL ORDER WILL HAVE THE POTENTIAL TO INCREASE THE SURCHARGE WHILE AT THE SAME TIME CREATE A CHILLING EFFECT ON THE GROWTH OF SOLAR ENERGY RESOURCES IN ARIZONA.

I OPPOSED A PROVISION IN THE PIERCE REVISED AMENDMENT # 4, WHICH ALLOWS THE COMPANY TO RECOVER LOST REVENUE FOR PROJECTS FUNDED THROUGH THE LEGACY COST BUDGET AT A RATE OF \$0.07810 PER KWH. THE COMMISSION HAS DENIED RECOVERY OF LOST REVENUE IN THE PAST WHEN IT CONSIDERED TEP'S PREVIOUS REST IMPLEMENTATION PLANS. THE AMENDMENT IS A SIGNIFICANT SHIFT IN POLICY, WHICH WOULD BE MORE APPROPRIATELY ADDRESSED IN TEP'S NEXT RATE CASE. THIS SHIFT MAY LIMIT THE INSTALLATION OF RESIDENTIAL AND COMMERCIAL PV BECAUSE IT INCREASES THE COST PER KWH FOR TEP PROJECTS WHERE LOST REVENUE RECOVERY IS GRANTED. IT ALSO DIRECTS FUNDS BACK TO TEP RATHER THAN FUNDING RENEWABLE ENERGY INSTALLATIONS, AND WILL FURTHER REDUCE THE BUDGET FOR CUSTOMERS' INCENTIVES UNLESS THE SURCHARGE IS INCREASED.

Decision No. 72736

Page 2

Kennedy's Dissent TEP 2012 REST Implementation Plan
January 4, 2012

I AM TROUBLED WITH LANGUAGE IN THE PIERCE AMENDMENT NO. 2 THAT REDUCES THE COMPANY'S PROPOSED RESEARCH AND DEVELOPMENT BUDGET NEARLY IN HALF, FROM \$956,000 TO \$525,000. I UNDERSTAND COMMENTS ON THIS AMENDMENT CONCERNING THE DESIRE TO ALLOCATE MORE FUNDS FOR ROOFTOP PV INSTALLATIONS. HOWEVER, I DO NOT BELIEVE IT IS WISE TO BE SHORTSIGHTED. RESEARCH ON THE EFFECTS OF RENEWABLES ON THE GRID AND ON THE POSSIBILITIES FOR ENERGY STORAGE BENEFITS ALL RATEPAYERS. A POTENTIAL SHORT-TERM SAVINGS ON RESEARCH NOW COULD RESULT IN SUBSTANTIAL BUDGET PROBLEMS IN THE FUTURE. IN MY OPINION, DIRECTING THE COMPANY AND OUR UNIVERSITIES TO GO TO THE LEGISLATURE FOR FUNDING FOR COLLABORATIVE RESEARCH IS THE KISS OF DEATH FOR THESE PROGRAMS.

FURTHER, I STILL HAVE QUESTIONS ON THE BURNS REVISED AMENDMENT NO. 2, WHICH IMPOSES A SURCHARGE FOR THOSE WHO HAVE MADE A SIGNIFICANT FINANCIAL COMMITMENT TO INSTALL RENEWABLE ENERGY SYSTEMS. I FEAR THAT THIS AMENDMENT WILL CREATE A BARRIER TO IMPLEMENTING SOLAR ENERGY RESOURCES IN OUR GREAT SUNNY STATE OF ARIZONA. I CAN APPRECIATE THE DISCUSSION ON THE FAIRNESS OF THE INCENTIVES. HOWEVER, THE RECORD ON THIS SURCHARGE DID NOT ADEQUATELY CONSIDER THE BENEFITS OF SUCH SYSTEMS. EVEN THOSE WHO DO NOT SEEK THE INCENTIVE, RECEIVE BENEFITS FROM THEIR NEIGHBORS INSTALLING PV. THESE BENEFITS INCLUDE THE UTILITIES' DEFERRAL OF BUILDING AND INCLUDING COSTLY GENERATION IN RATE BASE AND INCREASE RELIABILITY BY PROVIDING ALTERNATIVES TO TRADITIONAL ENERGY RESOURCES. ADDITIONALLY, THERE IS A BOOST TO OUR SAGGING ECONOMY AND AN IMPROVEMENT IN THE ENVIRONMENT BY REDUCING THE NEED FOR MORE POLLUTING FORMS OF ENERGY GENERATION.

I BELIEVE THE DISCUSSION ON THIS SURCHARGE SHOULD HAVE BEEN ADDRESSED THROUGH EITHER A STAKE HOLDER'S PROCESS OR DISCUSSED AT THE NUMEROUS OPEN MEETINGS THAT WERE CONDUCTED TO REVIEW THE REST IMPLEMENTATION PLANS. IT WAS MY UNDERSTANDING THAT THOSE OPEN MEETINGS WERE HELD TO PROVIDE THOROUGH DISCUSSIONS AND TO ADDRESS ANY CONCERNS ON THE PROPOSED REST PROGRAMS AND BUDGETS BEFORE FINAL APPROVAL BY THE COMMISSION. I DO NOT RECALL ANY DISCUSSION AT THOSE OPEN MEETINGS ON THE NEED TO ASSESS A NEW COMPONENT FOR THE RENEWABLE ENERGY SURCHARGE. THERE ARE TOO MANY UNANSWERED QUESTIONS TO HAVE ADOPTED THIS SURCHARGE IN THIS DECISION.

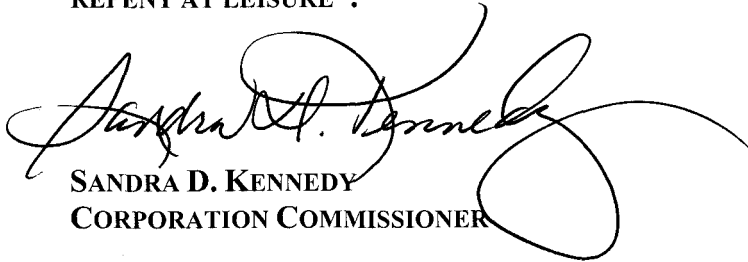
FINALLY, I WILL CONCLUDE WITH COMMENTS ON THE PROCESS. I CAN FULLY APPRECIATE THE NEED TO CONDUCT OUR OPEN MEETINGS IN A TIME CONSCIOUS MANNER. HOWEVER, I TAKE ISSUE WITH THE PROCEDURE SPRUNG ON US ON THE LAST DAY OF OUR DELIBERATION. I MIGHT HAVE BEEN MORE RECEPTIVE TO THE CHAIRMAN'S PLAN TO LIMIT COMMISSIONERS' SPEAKING TIME ON DECEMBER 20, 2011, HAD SUCH LIMITATIONS BEEN CONSIDERED AT AN EARLIER STAFF OPEN MEETING, OR AT THE VERY LEAST, AT THE ONSET OF THE DECEMBER 13, 2011 OPEN MEETING.

I KNOW THAT SOME COMMISSIONERS EXPRESSED FRUSTRATION IN HAVING TO SPEND TWELVE HOURS IN A PREVIOUS OPEN MEETING; NO ONE LOOKS FORWARD TO THAT. HOWEVER,

Page 3
Kennedy's Dissent TEP 2012 REST Implementation Plan
January 4, 2012

COMMISSION CONSIDERATION OF THE REST IMPLEMENTATION PLANS REFLECTS SIGNIFICANT RATEMAKING POLICY AND BUDGET ISSUES. IN MY OPINION, THE PUBLIC, INCLUDING OUR CONSTITUENTS AND RATEPAYERS, EXPECT THEIR ELECTED COMMISSIONERS TO ASK ALL THE IMPORTANT QUESTIONS TO ENSURE THAT WE HAVE ADOPTED A DECISION THAT IS FAIR, REASONABLE AND IN THE PUBLIC INTEREST. DOING THIS REQUIRES US TO DO OUR DUE DILIGENCE, AND THAT MAY TAKE LONG HOURS OR MANY DAYS. I DID NOT BELIEVE IT WAS APPROPRIATE FOR OUR DELIBERATIONS TO BE CONSTRAINED BY AN ARBITRARY TIME LIMIT. I MAY NOT AGREE WITH ANOTHER COMMISSIONER'S POINT OF VIEW, BUT EACH COMMISSIONER SHOULD HAVE THE RIGHT AND OPPORTUNITY TO ASK QUESTIONS TO BE MORE FULLY INFORMED, AND TO EXPRESS THEIR OPINIONS WITHOUT WORRYING ABOUT A TIME CLOCK.

YEARS AGO, WHEN I WAS A NEWLY ELECTED LEGISLATOR, A WISE AND LEGENDARY COLLEAGUE WOULD CONSTANTLY REMIND US THAT WHEN WE "LEGISLATE IN HASTE, WE REPENT AT LEISURE".

A handwritten signature in cursive script, appearing to read "Sandra D. Kennedy", written in black ink. The signature is fluid and somewhat stylized, with a large loop at the end.

SANDRA D. KENNEDY
CORPORATION COMMISSIONER