**OPEN MEETING** 



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- TO: THE COMMISSION
- FROM: Utilities Division
- DATE: October 25, 2011
- RE: UNS ELECTRIC, INC. APPLICATION FOR APPROVAL OF ITS 2012 RENEWABLE ENERGY STANDARD AND TARIFF IMPLEMENTATION PLAN (DOCKET NO. E-04204A-11-0267)

On July 1, 2011, UNS Electric, Inc. ("UNS") filed for Commission approval of its 2012 Renewable Energy Standard and Tariff ("REST") Implementation Plan. On July 15, 2011, UNS filed a REST plan summary and a set of Powerpoint slides summarizing its REST plan. On July 29, 2011, UNS filed a Notice of Errata, updating its REST plan and related exhibits.

The following parties filed for intervention in this docket: SolarCity Corporation ("SolarCity") on August 9, 2011 and the Residential Utility Consumer Office ("RUCO") on August 31, 2011. All of these parties have subsequently been granted intervention in this docket. Comments have been filed in this proceeding by SolarCity on August 12, 2011. Questions from Commissioners Offices were filed on August 30 and September 7, 2011 from Commissioner Newman's office, and September 2, 2011 from Commissioner Burns' office. TEP filed answers to Commissioner Burns' questions on October 3, 2011 and to Commissioner Newman's questions on October 11, 2011.

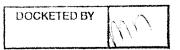
UNS' initial filing requests approval of various REST plan components, including a budget, incentive levels, an incentive trigger mechanism, customer class caps, various program details, continuation of the Bright Arizona Solar Buildout Plan, introduction of a School Vocational Program, and approval of research and development funding for 2011.

# **UNS REST Experience Under 2011 REST Plan**

The Commission-approved implementation plan for 2011 contemplated a budget of \$8.1 million. UNS projects spending its entire REST budget in 2011.

Regarding installations and reservations, the table below summarizes installations and reservations for future installations through September 30, 2011 for UNS.





Residential	Photovoltaics		Solar Hot Water		
	Number of Systems	kW	kWh	Number of Systems	kWh
2011 Installations	95	531	902,700	15	41,250
Reservations	120	915	1,555,500	23	63,250

Commercial	Photovoltaics		Solar Hot Water		
	Number of		Number of		
	Systems	kW	kWh	Systems	kWh
2011	23	511	868,700	0	0
Installations					
Reservations	21	1,820	3,094,000	1	5,091

The table below shows UNS' 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	7,169	5,822 (installed – annualized)
		7,423 (installed –
		annualized/reserved)
Commercial DG	7,169	5,510 (installed – annualized)
		8,695 (installed –
		annualized/reserved)
Non-DG	43,016	22,136

## School Vocational Program

In 2010, UNS proposed a new School Vocational Program ("SVP") that would have involved the deployment of photovoltaic systems at high schools within UNS' service territory in 2011. Due to concerns with the size of UNS' 2011 REST plan budget, the Commission did not approve UNS' proposed SVP program, but indicated UNS could request the program the following year if a similar program implemented by Tucson Electric Power Company ("TEP") in 2011 was successful. UNS and TEP believe TEP's SVP program was successful in 2011 and are thus requesting approval of a schools program in 2012. The SVP program would also provide assistance to schools in creating vocational training programs at the schools. UNS' proposed program budget for 2012 is \$350,000. In discussions with UNS, the Company indicated that its budget is based upon installation of systems from 5 kW to 10 kW. The Company has indicated to Staff that all systems installed in 2012 could be installed at a 5 kW size, thus saving some system costs. Staff recommends that the size of systems installed in 2012 be set at 5 kW. UNS' budget includes \$50,000 in training costs. Staff believes the

program is beneficial and recommends approval of the SVP program at a reduced budget of \$227,500, including \$190,000 for systems and \$37,500 for training costs.

#### **Bright Arizona Solar Buildout Plan**

In UNS' proposal for its 2011 REST plan, UNS requested approval of a four year buildout plan for the Bright Arizona Community Solar program for 1.25 MW each year of utility scale and utility-owned generation costs at a total cost of \$20 million or \$5 million per year.

The Bright Arizona program was approved by the Commission in Decision No. 72034 (December 10, 2010). The program allows UNS 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.

The Commission, in Decision No. 72034, also declined to approve the proposed fouryear buildout program as proposed by UNS, but rather approved it for one year, stating that UNS may seek approval of additional years for the buildout plan as part of Commission consideration of future REST plans. As proposed by UNS in its 2011 and 2012 REST plans, UNS would recover carrying costs, depreciation, operations and maintenance, and property tax costs through the REST surcharge until such time as UNS files its next rate case, when these costs would be considered for inclusion in UNS' rate base. UNS projects annual recovery through the REST surcharge in upcoming years as shown on Table 3 on page 5 of the Company's application. This involves collection of \$665,169 million in 2012 and \$323,341 million in 2013, with these assets then projected to enter UNS' rate base as part of a 2013 rate proceeding. UNS then projects the buildout plan resulting in new recoveries of \$665,169 in 2014 and \$1,293,362 in 2015 through the REST charge as a result of on-going buildout plan costs until such costs would be addressed in the following UNS general rate case. For the 2012 REST plan, the buildout plan costs of \$665,169 that UNS is proposing to recover include the line items shown in the following table.

Line Item	2011 Buildout Plan Costs
Carrying Costs	\$365,169
Book Depreciation	\$250,000
Operations and Maintenance	\$50,000
Total	\$665,169

Other generating investments made by UNS between rate cases would not receive similar carrying cost and other recovery treatment prior to their inclusion in rate base in UNS' next rate proceeding. Staff believes that as the renewable energy generation industry matures, it should receive similar treatment to other generation facilities UNS would construct and then seeks recovery of in future rate proceedings. Given that the Commission has approved the treatment requested by UNS in approving the 2011 REST plan, Staff believes that a gradual

transition is warranted from providing recovery through the REST surcharge to seeking recovery through a general rate proceeding. Thus, Staff recommends that in regard to the 2012 REST plan budget, UNS be allowed to recover half of its requested recovery amount, \$332,585, through the 2012 REST surcharge. Staff further recommends that in regard to REST plan budgets in 2013 and beyond, that UNS not be allowed to recover costs from the buildout plan, but rather should seek recovery of those costs in its next general rate proceeding. Staff further recommends that the Commission should approve the buildout program for 2012 as part of UNS' 2012 REST plan, but, consistent with the Commission's decision on UNS' 2011 REST plan, approval should not be granted for additional future years. Rather, UNS should seek approval for future annual REST plans. Consistent with the Commission's approval of UNS' 2011 REST plan, Staff further recommends that reasonableness and prudency of buildout plan costs be examined in UNS' next rate case and that any costs determined to be not reasonable and prudent be refunded by the Company.

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

### **Marketing Costs**

UNS has typically included a marketing budget in its annual REST plan filings. The approved 2011 REST plan included a budget of \$118,000. For the proposed 2012 REST plan budget, UNS has proposed \$100,000 in funding for marketing. The table below shows a breakout of various forms of marketing and advertising for the proposed 2012 REST plan submitted by UNS.

Line Item	UNS Proposed Funding in 2012 REST Plan
Television Advertisement	\$36,000
Billboard Advertisement	\$21,000
Radio Advertisement	\$21,000
Sponsorships	\$11,000
Educational	\$7,000
Promotional	\$4,000
Total	\$100,000

Staff believes that with the significant growth in the renewable energy industry in Arizona in recent years, there are now many venues for publicizing renewable energy technologies and programs, and that the renewable energy industry should bear the primary responsibility for marketing renewable energy in Arizona. Therefore, the need for continued funding of marketing by UNS' ratepayers has declined significantly. Thus, Staff is recommending approval of a marketing budget of \$10,000 as part of its 2012 REST plan proposal. Staff further recommends that in future REST plans, the burden of proof will be borne by UNS to justify the use of ratepayer funds to pay for marketing if UNS proposes use of ratepayer funds for marketing in future REST plans.

#### **Labor Costs**

UNS has a number of employees whose sole function is to work on REST related matters, and the cost of such employees is normally funded as part of the annual REST budget. UNS' labor budget in the approved 2011 REST plan and its proposed 2012 REST plan are shown in the table below.

Line Item	Approved 2011 REST Budget	UNS Proposed 2012 REST Budget
Internal Labor	\$232,750	\$\$270,529
External Labor	\$15,000	\$5,000
Materials and Supplies	\$15,000	\$15,000
Total	\$262,750	\$290,529

It is difficult in a Staff review of a REST plan to assess in a detailed manner the necessary level of labor costs for a utility such as UNS to achieve its requirements under the REST rules. Staff believes that there are likely reasons why additional labor costs could be incurred, such as continued growth in the REST requirements, but also reasons why labor costs may be reduced, such as the small number of commercial DG systems contemplated in UNS' proposed plan. Staff believes that on balance, it would be reasonable to provide the same labor cost to UNS as was provided in the 2011 REST plan, with external labor reduced \$10,000 for 2012 as proposed in UNS' budget, or a total of \$252,750.

#### **Research and Development**

UNS is requesting approval of funding for research and development ("R&D) project work, in coordination with funding provided by TEP. Specifically, UNS would provide continued funding to the AZRise Global Institute at the University of Arizona ("AZRise"). The approved 2011 REST plan included \$20,000 for funding work with AZRise. UNS' proposed 2012 REST plan budget includes an increase in this funding to \$50,000 for 2012. While Staff believes there is value to the work AZRise does, Staff does not agree that the budget for such work should be significantly increased at this time. Therefore Staff recommends approval of funding for UNS to work with AZRise at a continued level of \$20,000, consistent with the 2011 REST plan.

### **Information Technology Costs**

UNS' proposed 2012 REST plan budget for information technology ("IT") includes a request for \$100,000, up from \$50,000 that was approved in the 2011 REST plan budget. Staff believes that continued funding at the \$50,000 level, consistent with 2011 funding is reasonable and should be approved for UNS' 2012 REST plan.

#### Maximum Percentage of System Cost Paid Through Utility Rebates

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

#### **Metering Costs**

UNS has traditionally included funding in its REST plan budget to pay for UNS-owned meters to monitor actual production from renewable installations under its REST program. For 2012, UNS is proposing a budget of \$76,060 to pay for these meters. Arizona Public Service ("APS") does not use such meters and does not have a similar budget line item for these meters. Staff believes that while such meters are beneficial in knowing with more specificity what production is actually taking place from renewable energy installations, these meters are not required for UNS to meet its REST requirements and Staff recommends not providing funding for these meters in the 2012 REST plan budget.

#### **Recovery of 2010 Undercollection**

UNS' budget includes a proposal to recover a \$242,841 under-recovery it experienced in 2010. UNS has indicated to Staff that it spent roughly the amount budgeted for 2010, but that recoveries through the REST surcharge were lower than projected, resulting in the under-recovery. Staff is cognizant of UNS' desire to recover this additional amount of money through its 2012 REST budget. UNS similarly requested recovery of \$363,356 in underrecovered funds from 2009 in its 2011 REST plan budget, a request the Commission denied last year. Therefore Staff has removed this line item from UNS' budget under the Staff proposal, recognizing that

UNS can recover these funds through spending less than the budgeted amount in 2012 or another future year.

#### 2012 REST Budget Proposals and DG Incentive Levels

#### UNS Proposed Budget

UNS' July 1, 2011 filing contained one budget proposal, including a request to collect a 2011 undercollection of \$242,841. Thus, UNS is proposing spending of \$9,233,874 and total costs to be recovered of \$9,476,715 in 2012.

### Staff Proposed Budgets

As discussed above regarding various budget line items, Staff is proposing to reduce the 2012 REST plan budget requested by UNS. To provide the Commission with a range of possible approaches to UNS' proposed 2012 REST plan budget, Staff will present two possible options in this Staff Report. The two options and their differing characteristics are described below.

Staff Option 1	Staff Option 2
Commercial DG UFI Funding of \$691,614	Commercial DG UFI Funding of \$286,803
Commercial DG PBI Funding of \$1,837,072	Commercial DG PBI Funding of \$1,709,178
Proposed Budget of \$7,315,078	Proposed Budget of \$6,782,373

Note: The approved 2011 budget is \$8,069,914.

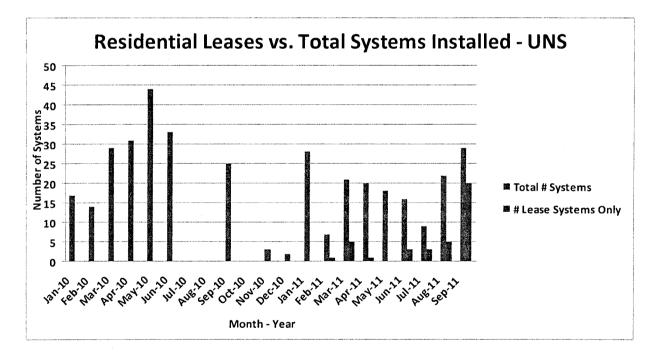
The Table below summarizes all of Staff's adjustments to UNS' proposed budgets.

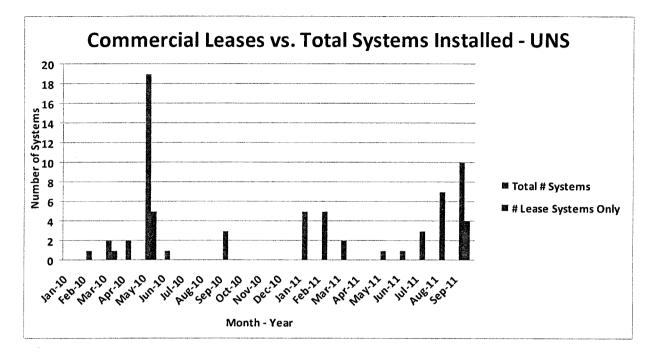
Budget Line Item	UNS 2012 Proposed Budget	Staff 2012 Proposed Budget	
UNS Owned Generation	\$665,169	\$332,585	
Residential UFI	\$2,644,741	\$1,752,337	
Commercial UFI	\$971,584	\$691,614 (Option 1)	
		\$286,803 (Option 2)	
Commercial PBI	\$\$1,837,072	\$1,837,072 (Option 1)	
		\$1,709,178 (Option 2)	
Marketing	\$100,000	\$10,000	
Schools Program	\$300,000	\$190,000	
TEP Training Costs	\$50,000	\$37,500	
Metering	\$76,060	\$0	
Total Labor Costs	\$291,529	\$252,750	
Research and Development	\$50,000	\$20,000	
Dues and Fees	\$15,000	\$7,500	
Recovery of 2011	\$242,841	\$0	
Undercollection			

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

UNS 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. UNS' proposal is to provide a UFI to non-leased residential DG systems of \$1.60 per watt and a UFI of \$1.00 per watt for leased systems. UNS 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, UNS believes that non-leased systems will not be competitive in the residential DG market. UNS also has noted to Staff that its proposed \$1.00 per watt incentive level for leased systems matches the current \$1.00 per watt incentive provided by APS under its rapid reservation program, with leased systems making up a high percentage of systems under the APS program.

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





The graphs above demonstrate that leased systems have in very short order become a major factor in the UNS market. In various venues related to this filing, UNS, 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 UNS' application, Staff has been unable to reconcile the differing representations made by UNS and other parties regarding leased versus non-leased systems.

For purposes of Staff's recommendations in this memorandum, 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 UNS' proposed REST plan and other documents indicate, then UNS 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 UNS' customers.

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.

#### Commercial DG Compliance

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

"An Affected Utility may satisfy no more than 10 percent of its annual Distributed Renewable Energy Requirement from Renewable Energy Credits derived from distributed Renewable Energy Resources that are non-utility owned generators that 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."

Thus, 10 percent of the total annual DG requirement, equivalent to 20 percent of the total commercial DG requirement, could be met by such wholesale purchases. To date UNS has not claimed most of its wholesale distributed generation purchases under this provision, even though it has wholesale purchase contracts that would qualify under this provision. UNS has indicated to Staff that it has 10 MW of wind and 6 MW of solar wholesale purchases that generate roughly 41,000 MWH annually that are eligible to be counted as commercial DG. If these wholesale purchases were counted toward UNS' commercial DG requirements, it would result in UNS needing significantly less other commercial DG. Staff thus recommends that UNS report the allowable amount of wholesale DG as commercial DG for purposes of compliance with the REST rules. To the extent the Commission wishes to fund additional commercial DG projects in light of the size of the wholesale DG component eligible to be counted as commercial DG, such commercial DG projects can be given funding.

Industry representatives have expressed concern that with the structure of the REST rules, there may be a significant drop in the amount of DG required in upcoming years. This is fundamentally a result of the design of the REST rules, where the percentage of DG required grows through 2012, increasing from 5 percent in 2007 to 30 percent in 2012 and years thereafter. The solar industry has, in effect, become reliant on the annual 5 percent per year increase in the DG portion of the REST requirements built into the REST rules through 2012, providing a relatively steady opportunity for more DG projects each year.

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

Year	<b>Overall REST Requirement</b>	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%

The September 13, 2011 comments from the Southern Arizona Solar Standards Board ("SASSB") in Docket No. E-01933A-11-0269, regarding TEP's 2012 REST plan, contains a graph on the front page which illustrates the dip in commercial DG requirements under the REST rules for the 2013 to 2015 period. The next page of the SASSB comments shows a second graph, reflecting a proposal by SASSB to shift some portion of DG requirements further in the future into the 2013-2015 period to at least partially fill in the dip shown for that period. Concerns with not taking action to fill in the 2013-2015 dip include possibly significant declines in installations and industry activity during that period. Staff would note that this issue has existed since the time the REST rules were created and nobody in past years has proposed scaling back the amount of DG in prior years to save some portion of those DG requirements to fill in the 2013-2015 dip. Importantly, this is not an issue that impacts the 2012 REST plans, as 2012 sees another 5 percent step up in the DG portion of the full REST requirements. While Staff believes that this is an issue of importance to the solar industry, it is not an issue that needs to be addressed in the Commission's consideration of the 2012 REST plans. Staff thus recommends that UNS, when it files its proposed 2013 REST plan in mid-2012, include a discussion of this issue in its filing and make a proposal as to whether UNS believes the Commission should take action beyond what is required in the REST rules to address the 2013-2015 dip.

#### Staff Proposed 2012 UFI Incentive Levels

UNS' filing proposed a residential DG UFI of \$1.60 for non-leased systems and \$1.00 for leased systems. UNS is further proposing a commercial UFI of \$1.30 for commercial DG systems. Staff would note that, as discussed earlier in the Staff report, Staff is not proposing separate residential UFI levels for leased and non-leased systems. Information from UNS indicates that leased system applications are now occurring in both the residential and commercial DG sectors. As noted above, APS' Rapid Reservation Program has been having significant participation through 2011 at the \$1.00 per watt UFI level. UNS' application in this proceeding contemplates an incentive level of \$1.00 per watt for leased residential DG UFI projects. Thus, Staff believes that there are multiple indications that a \$1.00 per watt incentive level may result in significant participation in UNS' market in 2012. Thus, Staff is proposing a

residential DG UFI level of \$1.00 per watt in 2012. Staff is proposing the same \$1.00 per watt UFI level for commercial DG projects in UNS' market in 2012. A side benefit of lowering UNS' proposed \$1.50 per watt commercial DG UFI to the \$1.00 per watt level proposed by Staff is that any funds allocated toward the commercial DG UFI will stretch further, resulting in more commercial DG installations in 2012.

UNS' July 1, 2011 filing contains trigger proposals for the residential and commercial DG UFI incentive levels if participation exceeds 60 percent compliance on or before June 30, 2012, as UNS' 2011 triggers operated. In UNS' initial filing, the residential incentive trigger would result in a reduction to \$1.35 per watt if the trigger were reached. The commercial incentive trigger would result in a reduction to \$1.05 per watt if the trigger is reached. UNS' 2011 REST plan is the first REST plan to contain such triggers, but neither trigger was reached in 2011. Staff believes that the trigger concept merits continuation, albeit at adjusted levels to reflect Staff's proposed lower UFI levels and with an additional trigger date. Staff believes that the trigger mechanism needs to be more aggressive, given that funds tend to run out later in the year and there may be further reductions in the cost of renewable resources as the year progresses. Staff is proposing three separate triggers.

Thus, under Staff's proposal for residential DG, the UFI would be reduced to \$0.85 per watt if 45 percent compliance is reached on or before June 30, 2012. In like manner, for commercial DG, the UFI would be reduced to \$0.85 per watt if 45 percent compliance is reached on or before June 30, 2012. The second triggers for both residential and commercial DG would, if the June 30, 2012 trigger had been reached, reduce the incentive to \$0.70 per watt if 70 percent or more of the incentive funding is reserved prior to September 30, 2012. If the June 30, 2012 trigger has not been reached, then the second trigger would reduce the incentive to \$0.85 per watt. The third trigger would involve a step-down in the incentive level if 90 percent compliance is reached on or before November 30, 2011. The incentive would then be reduced to \$0.50 per watt if both previous triggers were reached, \$0.70 per watt if one previous trigger was reached, and \$0.85 per watt if no previous triggers were reached in 2012. The chart below lays out how the overall trigger mechanism would work.

Date of Trigger	Compliance Level to Activate Trigger	Incentive Level If Trigger Activated
June 30, 2011	45%	\$0.85 per watt
September 30, 2011	70%	\$0.85 per watt if June 30 trigger was not activated.
		\$0.70 per watt if June 30 trigger was activated.
November 30, 2011	90%	\$0.85 per watt if no previous 2012 triggers activated. \$0.70 if one previous 2012 trigger activated. \$0.50 per watt if both previous 2012 triggers activated.

On the day that any trigger is activated, UNS will notify the solar industry by e-mail and UNS will provide a similar notice on its website. The mechanics of the residential and commercial triggers would include timely notification to the Commission and installers if the trigger is reached. As well, Staff recommends that UNS post information on its own website, and on the Arizonagoessolar.org website at least every two weeks, regarding its progress toward reaching the triggers.

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

#### 2012 REST Plan Overall Budget Options

The table below shows proposed spending levels by area for UNS' proposed 2012 REST budget options and Staff's proposed 2012 REST budget options.

Budget Components	2012 UNS Proposal	2012 Staff Option 1	2012 Staff Option 2
Purchased Renewable			
Energy			
Above market cost of	\$2,126,470	\$2,126,470	\$2,126,470
conventional generation			
UNS Owned	\$665,169	\$332,585	\$332,585
Subtotal	\$2,791,639	\$2,459,055	\$2,459,055
Customer Sited Distributed			
Renewable Energy			
Up-front incentive -	\$2,644,741	\$1,752,337	\$1,752,337
residential			
Up-front incentive -	\$971,584	\$691,614	\$286,803
commercial			
Annual Performance-Based	\$1,837,072	\$1,837,072	\$1,709,178
Incentive (PBI)			
Meter Reading	\$6,250	\$6,250	\$6,250
Marketing	\$100,000	\$10,000	\$10,000
Subtotal	\$5,559,647	\$4,297,273	\$3,764,568
Technical Training			
Schools Program	\$300,000	\$190,000	\$190,000
Internal and Contractor	\$50,000	\$37,500	\$37,500
Training			
Subtotal	\$350,000	\$227,500	\$227,500
Information Systems			
Subtotal	\$100,000	\$50,000	\$50,000
Metering			
Subtotal	\$76,060	\$0	\$0
Labor and Administration			· · ·
Labor, Materials, Supplies	\$290,529	\$252,750	\$252,750
AZ Solar Website	\$1,000	\$1,000	\$1,000
Subtotal		\$253,750	\$253,750

Research and Development				
AZRISE	\$50,000	\$20,000	\$20,000	
Dues and Fees	\$15,000	\$7,500	\$7,500	
Subtotal	\$65,000	\$27,500	\$27,500	
Total Spending	\$9,233,874	\$7,315,078	\$6,782,373	
UnderRecovered 2010 Funds	\$242,841	\$0	\$0	
Total Amount for Recovery	\$9,476,715	\$7,315,078	\$6,782,373	

#### **Recovery of Funds Through 2012 REST Charge**

UNS' proposed caps and per kWh charge are designed to recover UNS' proposed recovery amount of \$9.5 million. Staff's proposed caps and per kWh charge are designed to recover Staff's proposed budget of \$7.3 million and \$6.8 million for the two options provided by Staff.

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

	2011 Approved	2012 UNS Proposal	2012 Staff Option 1	2012 Staff Option 2
REST Charge	\$0.008315	\$0.010259	\$0.007795	\$0.007597
(per kWh)				
Class Caps				
Residential	\$5.00	\$6.00	\$4.50	\$4.00
Commercial	\$160.00	\$192.00	\$150.00	\$140.00
Industrial and	\$5,000.00	\$6,000.00	\$5,500.00	\$5,000.00
Mining				
Lighting	\$140.00	\$192.00	\$135.00	\$130.00

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

	2011 REST Plan	2012 UNS Proposal	2012 Staff Option 1	2012 Staff Option 2
Residential	\$4,178,457	\$4,670,642	\$3,505,153	\$3,153,976
	(51.8%)	(49.2%)	(47.9%)	(46.5%)
Commercial	\$2,858,280	\$3,517,501	\$2,694,023	\$2,589,336
	(35.4%)	(37.1%)	(36.8%)	(38.2%)
Industrial and	\$1,021,285	\$1,289,076	\$1,111,080	\$1,034,273
Mining	(12.7%)	(13.6%)	(15.2%)	(15.3%)
Lighting	\$6,115	\$7,304	\$5,094	\$4,964
	(0.1%)	(0.1%)	(0.1%)	(0.1%)
Total	\$8,064,137	\$9,484,523	\$7,315,350	\$6,782,550

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

Customer Class	2012 Projected Sales (MWH)
Residential	856,778 (44.0%)
Commercial	621,767 (31.9%)
Industrial and Mining	467,519 (24.0%)
Lighting	3,127 (0.2%)
Total	1,949,192

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

Contribution by Customer Class (per kWh)	2011 REST Plan (per kWh)	2012 UNS Proposal (per kWh)	2012 Staff Option 1 (per kWh)	2012 Staff Option 2 (per kWh)
Residential	\$0.0051	\$0.0055	\$0.0041	\$0.0037
Commercial	\$0.0046	\$0.0057	\$0.0043	\$0.0042
Industrial/ Mining	\$0.0022	\$0.0028	\$0.0024	\$0.0022
Lighting	\$0.0072	\$0.0023	\$0.0016	\$0.0016

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

	2012 UNS Proposal	2012 Staff Option 1	2012 Staff Option 2
Residential -	\$4.84	\$3.64	\$3.28
Average Bill			
Commercial -	\$30.18	\$22.76	\$21.88
Average Bill			
Industrial and	\$4,475.96	\$3,857.92	\$3,591.23
Mining - Average			
Bill			· · · · · · · · · · · · · · · · · · ·
Lighting - Average	\$2.28	\$2.23	\$2.17
Bill			
Residential –	70.6%	70.6%	70.6%
Percent at Cap			
Commercial –	5.0%	5.0%	5.0%
Percent at Cap			
Industrial and	50.4%	46.2%	47.9%
Mining – Percent at			
Сар			
Lighting – Percent	0.1%	0.1%	0.1%
at Cap			

Customer Types	kWh / mo.	2011 REST Plan	2012 UNS Proposal	2012 Staff Option 1	2012 Staff Option 2
Residence Consuming 400 kWh	400	\$3.33	\$4.10	\$3.13	\$3.05
Residence Consuming 890 kWh	890	\$5.00	\$4.84	\$4.50	\$4.00
Residence Consuming 2,000 kWh	2,000	\$5.00	\$6.00	\$4.50	\$4.00
Dentist Office	2,000	\$16.63	\$20.52	\$15.64	\$15.24
Hairstylist	3,900	\$32.43	\$40.01	\$30.50	\$29.73
Department Store	170,000	\$160.00	\$192.00	\$150.00	\$140.00
Mall	1,627,100	\$160.00	\$192.00	\$150.00	\$140.00
Retail Video Store	14,400	\$119.74	\$147.73	\$112.62	\$109.76
Large Hotel	1,067,100	\$160.00	\$192.00	\$150.00	\$140.00
Large Building Supply	346,500	\$160.00	\$192.00	\$150.00	\$140.00
Hotel/Motel	27,960	\$160.00	\$192.00	\$150.00	\$140.00
Fast Food	60,160	\$160.00	\$192.00	\$150.00	\$140.00
Large High Rise Office Bldg	1,476,100	\$160.00	\$192.00	\$150.00	\$140.00
Hospital (< 3 MW)	1,509,600	\$5,000.00	\$6,000.00	\$5,500.00	\$5,000.00
Supermarket	233,600	\$160.00	\$192.00	\$150.00	\$140.00
Convenience Store	20,160	\$160.00	\$192.00	\$150.00	\$140.00
Hospital (> 3 MW)	2,700,000	\$5,000.00	\$6,000.00	\$5,500.00	\$5,000.00
Copper Mine	72,000,000	\$5,000.00	\$6,000.00	\$5,500.00	\$5,000.00

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

Staff recommends approval of the proposed Staff Option 1. Staff believes that this recommendation provides adequate funding to more efficiently achieve UNS' 2012 REST goals and even exceed its commercial DG requirement. Staff Option 1 also provides a reduction in the budget both from the 2011 approved REST plan budget and UNS' proposals for the 2012 REST plan budget. Staff recognizes that the Commission could select Staff Option 2 and still expect to meet the commercial DG requirement for 2012, but Staff believes there is value to providing a more significant level of funding for commercial DG projects, recognizing that during next year's consideration of UNS' 2013 REST plan, there is likely to be further consideration of the dip in new incremental DG required in 2013-2015 as well as potential commercial DG overcompliance.

#### Staff's Concerns About REST Plan Formats

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

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

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

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

#### **Staff Recommendations**

- 1. Staff recommends that the Commission approve the Staff proposed Option 1 for the 2012 REST plan, reflecting a REST charge of \$0.007795 per kWh, and related caps reflected in the Staff proposal. This includes total spending and a total budget of \$6,782,550.
- 2. Staff recommends that the residential PV Up-Front Incentive be set at \$1.00 per watt on January 1, 2012.
- 3. Staff recommends that the non-residential Up-Front Incentive be set at \$1.00 per watt.
- 4. Staff recommends that the upper limit for non-residential Production Based Incentives be set at \$0.125 per kWh for 70-200 kW systems, \$0.105 per kWh for 201-400 kW systems and \$0.091 per kWh for 401 kW or higher systems.

- 5. Staff further recommends approval of the trigger mechanisms for reducing DG incentives as proposed by Staff, with trigger dates of June 30, 2012 (45 percent), September 30, 2012 (70 percent) and November 30, 2012 (90 percent). Incentive levels would then be set at \$0.85 per watt after the first trigger occurs, \$0.70 per watt after the second trigger occurs, and \$0.50 per watt after the third trigger occurs.
- 6. Staff further recommends that in regard to the Bright Arizona Buildout Plan in the 2012 REST plan budget, UNS be allowed to recover half of its requested recovery amount, \$332,585, through the 2012 REST surcharge.
- 7. Staff further recommends that in regard to REST plan budgets in 2013 and beyond, that UNS not be allowed to recover costs from the Bright Arizona Buildout Plan, but rather should seek recovery of those costs in the next general rate proceeding.
- 8. Staff further recommends that the Commission approve the buildout program for 2012 as part of UNS' 2012 REST plan, but, consistent with the Commission's decision on UNS' 2011 REST plan, approval should not be granted for additional future years. Rather, UNS should seek approval for further years of the buildout plan as part of the Company's seeking of Commission approval for future annual REST plans.
- 9. Staff further recommends that reasonableness and prudency of buildout plan costs be examined in UNS' next rate case and that any costs determined not to be reasonable and prudent be refunded by the Company.
- 10. Staff further recommends that in future REST plans, the burden of proof will be borne by UNS to justify the use of ratepayer funds to pay for marketing if UNS proposes to use ratepayer funds for marketing in future REST plans.
- 11. Staff further recommends approval of UNS' proposed research and development projects and funding as modified by Staff herein.
- 12. Staff recommends reducing the maximum percentage of a project that can be paid for with utility incentives to 40 percent.
- 13. Staff further recommends that the Commission not differentiate between leased and non-leased systems in setting DG UFIs for UNS' 2012 REST plan.
- 14. Staff further recommends that UNS report the total allowable amount of wholesale DG as commercial DG for purposes of compliance with the REST rules.

- 15. Staff further recommends that UNS post information on its own website, and on the Arizonagoessolar.org website at least every two weeks, regarding its progress toward reaching the triggers.
- 16. Staff further recommends approval of the School Vocational Program, as discussed herein.
- 17. Staff further recommends that UNS not commit to or expend any further ratepayer funds for UFI or PBI incentives once a given year's approved level of funds is depleted, absent approval from the Commission for such action.
- 18. Staff further recommends approval of the formation of the REST Format Working Group as discussed herein. UNS and other utilities would submit the Working Group's report and recommendations by September 1, 2012, for Staff approval.
- 19. Staff recommends that UNS file the REST-TS1, consistent with the Decision in this case, within 15 days of the effective date of the Decision.

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Steven M. Olea Director Utilities Division

SMO:RGG:lhm\RM

ORIGINATOR: Robert Gray

1	BEFORE THE ARIZONA CORPORATION COMMISSION
2	GARY PIERCE
3	Chairman BOB STUMP
4	Commissioner SANDRA D. KENNEDY
5	Commissioner PAUL NEWMAN
6	Commissioner BRENDA BURNS
7	Commissioner
8	IN THE MATTER OF UNS ELECTRIC, INC.) DOCKET NO. E-04204A-11-0267
	APPLICATION FOR APPROVAL OF ITS
9	2012 RENEWABLE ENERGY STANDARD { DECISION NO AND TARIFF IMPLEMENTATION PLAN ) ORDER
10	
11	)
12	Open Meeting November 8 and 9, 2011
13	Phoenix, Arizona
14	BY THE COMMISSION:
15	FINDINGS OF FACT
16	1. UNS Electric, Inc. ("UNS" or "Company") is engaged in providing electric service
17	within portions of Arizona, pursuant to authority granted by the Arizona Corporation Commission.
18	2. The following parties filed for intervention in this docket: SolarCity Corporation
19	("SolarCity") on August 9, 2011 and the Residential Utility Consumer Office ("RUCO") on
20	August 31, 2011. All of these parties have subsequently been granted intervention in this docket.
21	Comments have been filed in this proceeding by SolarCity on August 12, 2011. Questions from
22	Commissioners Offices were filed on August 30 and September 7, 2011 from Commissioner
23	Newman's office, and September 2, 2011 from Commissioner Burns' office. TEP filed answers to
24	Commissioner Burns' questions on October 3, 2011 and to Commissioner Newman's questions on
25	October 11, 2011.
26	3. UNS' initial filing requests approval of various REST plan components, including a
27	budget, incentive levels, an incentive trigger mechanism, customer class caps, various program
28	

Page	2
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details, continuation of the Bright Arizona Solar Buildout Plan, introduction of a School 1 2 Vocational Program, and approval of research and development funding for 2011.

- 3 **UNS REST Experience Under 2011 REST Plan**
- 4

4. The Commission-approved implementation plan for 2011 contemplated a budget of

5 \$8.1 million. UNS projects spending its entire REST budget in 2011.

5. Regarding installations and reservations, the table below summarizes installations 6 7 and reservations for future installations through September 30, 2011 for UNS.

8	Residential		Photovolta	nics	Sol	lar Hot Water
9		Number of Systems	kW	kWh	Number of Systems	kWh
10	2011	95	531	902,700	15	41,250
10	Installations					
11	Reservations	120	915	1,555,500	23	63,250

12	Commercial		Photovolta	ics	Sol	ar Hot Water
13		Number of Systems	kW	kWh	Number of Systems	kWh
14	2011 Installations	23	511	868,700	0	0
15	Reservations	21	1,820	3,094,000	1	5,091

16

6. The table below shows UNS' annual required MWh under the REST rules and its 17 installed-annualized and installed-annualized/reserved numbers. Installed annualized numbers 18 reflect systems that are installed and their production is annualized to reflect a full year's 19 production. Installed-annualized/reserved counts both the installed annualized systems, and the 20 systems that are reserved, but have not yet been installed.

21 Required (MWH) Produced/Banked (MWH) Residential DG 7,169 5,822 (installed – annualized) 22 7,423 (installed annualized/reserved) 23 Commercial DG 7,169 5,510 (installed – annualized) 24 8,695 (installed annualized/reserved) 25 Non-DG 43,016 22,136 26 27 28

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# 1 School Vocational Program

7. In 2010, UNS proposed a new School Vocational Program ("SVP") that would 2 have involved the deployment of photovoltaic systems at high schools within UNS' service 3 territory in 2011. Due to concerns with the size of UNS' 2011 REST plan budget, the Commission 4 did not approve UNS' proposed SVP program, but indicated UNS could request the program the 5 following year if a similar program implemented by Tucson Electric Power Company ("TEP") in 6 2011 was successful. UNS and TEP believe TEP's SVP program was successful in 2011 and are 7 thus requesting approval of a schools program in 2012. The SVP program would also provide 8 assistance to schools in creating vocational training programs at the schools. UNS' proposed 9 program budget for 2012 is \$350,000. In discussions with UNS, the Company indicated that its 10 budget is based upon installation of systems from 5 kW to 10 kW. The Company has indicated to 11 Staff that all systems installed in 2012 could be installed at a 5 kW size, thus saving some system 12 costs. Staff recommends that the size of systems installed in 2012 be set at 5 kW. UNS' budget 13 includes \$50,000 in training costs. Staff believes the program is beneficial and recommends 14 approval of the SVP program at a reduced budget of \$227,500, including \$190,000 for systems and 15 \$37,500 for training costs. 16

#### 17 Bright Arizona Solar Buildout Plan

8. In UNS' proposal for its 2011 REST plan, UNS requested approval of a four year
 build-out plan for the Bright Arizona Community Solar program for 1.25 MW each year of utility
 scale and utility-owned generation costs at a total cost of \$20 million or \$5 million per year.

9. The Bright Arizona program was approved by the Commission in Decision No. 72034 (December 10, 2010). The program allows UNS 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.

27 10. The Commission, in Decision No. 72034, also declined to approve the proposed
28 four-year buildout program as proposed by UNS, but rather approved it for one year, stating that

UNS may seek approval of additional years for the buildout plan as part of Commission 1 2 consideration of future REST plans. As proposed by UNS in its 2011 and 2012 REST plans, UNS would recover carrying costs, depreciation, operations and maintenance, and property tax costs 3 4 through the REST surcharge until such time as UNS files its next rate case, when these costs 5 would be considered for inclusion in UNS' rate base. UNS projects annual recovery through the REST surcharge in upcoming years as shown on Table 3 on page 5 of the Company's application. 6 7 This involves collection of \$665,169 million in 2012 and \$323,341 million in 2013, with these 8 assets then projected to enter UNS' rate base as part of a 2013 rate proceeding. UNS then projects 9 the buildout plan resulting in new recoveries of \$665,169 in 2014 and \$1,293,362 in 2015 through 10 the REST charge as a result of on-going buildout plan costs until such costs would be addressed in 11 the following UNS general rate case. For the 2012 REST plan, the buildout plan costs of \$665,169 that UNS is proposing to recover include the line items shown in the following table. 12

13	Line Item	2011 Buildout Plan Costs
	Carrying Costs	\$365,169
14	Book Depreciation	\$250,000
15	Operations and Maintenance	\$50,000
15	Total	\$665,169

16

17 11. Other generating investments made by UNS between rate cases would not receive 18 similar carrying cost and other recovery treatment prior to their inclusion in rate base in UNS' next 19 rate proceeding. Staff believes that as the renewable energy generation industry matures, it should 20 receive similar treatment to other generation facilities UNS would construct and then seeks 21 recovery of in future rate proceedings. Given that the Commission has approved the treatment 22 requested by UNS in approving the 2011 REST plan, Staff believes that a gradual transition is 23 warranted from providing recovery through the REST surcharge to seeking recovery through a 24 general rate proceeding. Thus, Staff recommends that in regard to the 2012 REST plan budget, 25 UNS be allowed to recover half of its requested recovery amount, \$332,585, through the 2012 26 REST surcharge. Staff further recommends that in regard to REST plan budgets in 2013 and 27 beyond, that UNS not be allowed to recover costs from the buildout plan, but rather should seek 28 recovery of those costs in its next general rate proceeding. Staff further recommends that the

Commission should approve the buildout program for 2012 as part of UNS' 2012 REST plan, but, 1 consistent with the Commission's decision on UNS' 2011 REST plan, approval should not be 2 granted for additional future years. Rather, UNS should seek approval for further years of the 3 4 buildout plan as part of the Company's seeking of Commission approval for future annual REST Consistent with the Commission's approval of UNS' 2011 REST plan, Staff further 5 plans. recommends that reasonableness and prudency of buildout plan costs be examined in UNS' next 6 7 rate case and that any costs determined to be not reasonable and prudent be refunded by the 8 Company.

12. In discussions with UNS, the Company has indicated that some portion of this 9 buildout program is not necessary to serve the Bright Arizona Community Solar program, but that 10 11 the Company believes that the buildout program should continue at its projected scale to provide some diversity in its renewable portfolio between utility-owned and third party owned renewable 12 generation. Staff believes that this is a reasonable proposal but that it is confusing to title the 13 program the Bright Arizona Solar Buildout program when all these assets are not necessarily 14 related to providing resources for the Bright Arizona Community Solar program. It should be 15 recognized that this buildout program is fundamentally a program to fund utility-scale generation 16 17 while recognizing that some portion of the assets built will provide resources for the Bright 18 Arizona Community Solar program.

19 Marketing Costs

13. UNS has typically included a marketing budget in its annual REST plan filings.
The approved 2011 REST plan included a budget of \$118,000. For the proposed 2012 REST plan
budget, UNS has proposed \$100,000 in funding for marketing. The table below shows a breakout
of various forms of marketing and advertising for the proposed 2012 REST plan submitted by
UNS.

25 Line Item	UNS Proposed Funding in 2012 REST Plan
Television Advertisement	\$36,000
Billboard Advertisement	\$21,000
Radio Advertisement	\$21,000
Sponsorships	\$11,000
28 Educational	\$7,000

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1	Promotional	\$4,000
~	Total	\$100,000
2		

~

3 14. Staff believes that with the significant growth in the renewable energy industry in 4 Arizona in recent years, there are now many venues for publicizing renewable energy technologies 5 and programs, and that the renewable energy industry should bear the primary responsibility for 6 marketing renewable energy in Arizona. Therefore, the need for continued funding of marketing 7 by UNS' ratepayers has declined significantly. Thus, Staff is recommending approval of a 8 marketing budget of \$10,000 as part of its 2012 REST plan proposal. Staff further recommends 9 that in future REST plans, the burden of proof will be borne by UNS to justify the use of ratepayer 10 funds to pay for marketing if UNS proposes use of ratepayer funds for marketing in future REST 11 plans.

12 Labor Costs

13 15. UNS has a number of employees whose sole function is to work on REST related
14 matters, and the cost of such employees is normally funded as part of the annual REST budget.
15 UNS' labor budget in the approved 2011 REST plan and its proposed 2012 REST plan are shown
16 in the table below.

17		Approved 2011 REST	UNS Proposed 2012 REST
	Line Item	Budget	Budget
18	Internal Labor	\$232,750	\$\$270,529
19	External Labor	\$15,000	\$5,000
17	Materials and Supplies	\$15,000	\$15,000
20	Total	\$262,750	\$290,529

21 16. It is difficult in a Staff review of a REST plan to assess in a detailed manner the 22 necessary level of labor costs for a utility such as UNS to achieve its requirements under the REST 23 rules. Staff believes that there are likely reasons why additional labor costs could be incurred. such as continued growth in the REST requirements, but also reasons why labor costs may be 24 25 reduced, such as the small number of commercial DG systems contemplated in UNS' proposed plan. Staff believes that on balance, it would be reasonable to provide the same labor cost to UNS 26 as was provided in the 2011 REST plan, with external labor reduced \$10,000 for 2012 as proposed 27 28 in UNS' budget, or a total of \$252,750.

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## 1 Research and Development

17. 2 UNS is requesting approval of funding for research and development ("R&D) 3 project work, in coordination with funding provided by TEP. Specifically, UNS would provide 4 continued funding to the AZRise Global Institute at the University of Arizona ("AZRise"). The approved 2011 REST plan included \$20,000 for funding work with AZRise. UNS' proposed 2012 5 REST plan budget includes an increase in this funding to \$50,000 for 2012. While Staff believes 6 7 there is value to the work AZRise does, Staff does not agree that the budget for such work should 8 be significantly increased at this time. Therefore Staff recommends approval of funding for UNS 9 to work with AZRise at a continued level of \$20,000, consistent with the 2011 REST plan.

## 10 Information Technology Costs

11 18. UNS' proposed 2012 REST plan budget for information technology ("IT") includes
12 a request for \$100,000, up from \$50,000 that was approved in the 2011 REST plan budget. Staff
13 believes that continued funding at the \$50,000 level, consistent with 2011 funding is reasonable
14 and should be approved for UNS' 2012 REST plan.

#### 15 Maximum Percentage of System Cost Paid Through Utility Rebates

16 19. In recent years, UNS' REST plans have included a provision that the maximum 17 percentage of system cost for a customer that could be paid through utility rebates would be 60 18 percent. The Commission approved a reduction of this percentage in UNS' 2011 REST plan to the 19 50 percent level. Staff believes that this should be given further consideration. To the extent the 20 maximum percentage can be reduced without significantly impacting the marketplace, such a 21 reduction could result in the most subsidized projects receiving a moderately lower subsidy. This 22 could result in a net increase in the number of projects completed for the same level of total 23 spending. The Company has indicated it did not anticipate that a reduction in the percentage to 40 percent would impact the amount of incentives paid and that UNS does not oppose such a change. 24 25 Staff believes that a reduction of this level to 40 percent would represent a further modest change, 26 but would be a step toward more efficiently spending REST funds. Staff recommends reducing 27 the maximum percentage of system cost that could be paid through utility rebates to 40 percent for 28 both residential and commercial projects.

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## 1 || Metering Costs

2 20. UNS has traditionally included funding in its REST plan budget to pay for UNS-3 owned meters to monitor actual production from renewable installations under its REST program. For 2012, UNS is proposing a budget of \$76,060 to pay for these meters. Arizona Public Service 4 5 ("APS") does not use such meters and does not have a similar budget line item for these meters. Staff believes that while such meters are beneficial in knowing with more specificity what 6 production is actually taking place from renewable energy installations, these meters are not 7 8 required for UNS to meet its REST requirements and Staff recommends not providing funding for 9 these meters in the 2012 REST plan budget.

## 10 Recovery of 2010 Undercollection

UNS' budget includes a proposal to recover a \$242,841 under-recovery it 11 21. experienced in 2010. UNS has indicated to Staff that it spent roughly the amount budgeted for 12 13 2010, but that recoveries through the REST surcharge were lower than projected, resulting in the under-recovery. Staff is cognizant of UNS' desire to recover this additional amount of money 14 through its 2012 REST budget. UNS similarly requested recovery of \$363,356 in underrecovered 15 16 funds from 2009 in its 2011 REST plan budget, a request the Commission denied last year. 17 Therefore Staff has removed this line item from UNS' budget under the Staff proposal, recognizing that UNS can recover these funds through spending less than the budgeted amount in 18 19 2012 or another future year.

#### 20 **2012 REST Budget Proposals and DG Incentive Levels**

21 UNS Proposed Budget

22 22. UNS' July 1, 2011 filing contained one budget proposal, including a request to
23 collect a 2011 undercollection of \$242,841. Thus, UNS is proposing spending of \$9,233,874 and
24 total costs to be recovered of \$9,476,715 in 2012.

25 Staff Proposed Budgets

26 23. As discussed above regarding various budget line items, Staff is proposing to
27 reduce the 2012 REST plan budget requested by UNS. To provide the Commission with a range
28 of possible approaches to UNS' proposed 2012 REST plan budget, Staff will present two possible

1 options in this Staff Report. The two options and their differing characteristics are described

2 below.

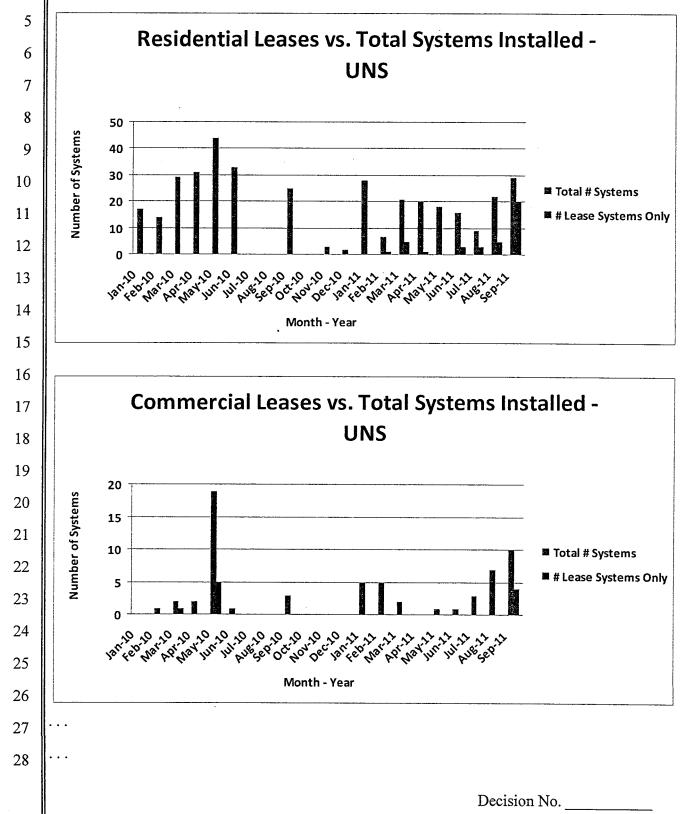
n			St. 60 - 42 - 2	
3	Staff Option 1		Staff Option 2	
Commercial DG UFI Funding o			Commercial D	G UFI Funding of \$286,803
4	Commercial DG PBI Funding of	of \$1,837,072	Commercial D	G PBI Funding of \$1,709,178
5	Proposed Budget of \$7,315,078		Proposed Budg	et of \$6,782,373
5	Note: The approved 2011 budget is \$	8,069,914.		
6	24. The Table below	v summarizes all	l of Staff's adjust	ments to UNS' proposed budgets
7	Budget Line Item	UNS 2012 Pro	oposed Budget	Staff 2012 Proposed Budget
0	UNS Owned Generation	\$665,169	oposed Dudget	\$332,585
8	Residential UFI			\$1,752,337
9		\$2,644,741		
2	Commercial UFI	\$971,584		\$691,614 (Option 1)
10				\$286,803 (Option 2)
10	Commercial PBI	\$\$1,837,072		\$1,837,072 (Option 1)
11				\$1,709,178 (Option 2)
	Marketing	\$100,000		\$10,000
12	Schools Program	\$300,000		\$190,000
	TEP Training Costs	\$50,000		\$37,500
13	Metering	\$76,060		\$0
14	Total Labor Costs	\$291,529		\$252,750
11	Research and Development	\$50,000		\$20,000
15	Dues and Fees	\$15,000		\$7,500
1.0	Recovery of 2011	\$242,841		\$0
16	Undercollection			

17

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

19 25. UNS is proposing in its 2012 REST plan to differentiate its residential DG UFI 20 between leased and non-leased systems. In past years, all residential DG systems were eligible for 21 the same level of UFI. UNS' proposal is to provide a UFI to non-leased residential DG systems of 22 \$1.60 per watt and a UFI of \$1.00 per watt for leased systems. UNS has indicated to Staff that it 23 believes that this differentiation is necessary due to various tax and accounting advantages leased 24 systems have that non-leased systems do not have. Absent the proposed differentiation, UNS 25 believes that non-leased systems will not be competitive in the residential DG market. UNS also 26 has noted to Staff that its proposed \$1.00 per watt incentive level for leased systems matches the 27 current \$1.00 per watt incentive provided by APS under its rapid reservation program, with leased 28 systems making up a high percentage of systems under the APS program.

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



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27. The graphs above demonstrate that leased systems have in very short order become a major factor in the UNS market. In various venues related to this filing, UNS, 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 UNS' application, Staff has been unable to reconcile the differing representations made by UNS and other parties regarding leased versus non-leased systems.

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

14 29. It is also worth noting that long term, if incentive levels continue to drop, they may 15 at some point in the future disappear altogether, at which time there would inherently be no 16 differentiation between incentives for leased and non-leased systems. Thus, if a differential is 17 established, it is possible it will only be effective for some limited period of time into the future 18 until incentives disappear.

19 Commercial DG Compliance

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

 "An Affected Utility may satisfy no more than 10 percent of its annual Distributed Renewable Energy Requirement from Renewable Energy Credits derived from distributed Renewable Energy Resources that are non-utility owned generators that 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."

31. Thus, 10 percent of the total annual DG requirement, equivalent to 20 percent of the
total commercial DG requirement, could be met by such wholesale purchases. To date UNS has
not claimed most of its wholesale distributed generation purchases under this provision, even

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1 though it has wholesale purchase contracts that would qualify under this provision. UNS has 2 indicated to Staff that it has 10 MW of wind and 6 MW of solar wholesale purchases that generate 3 roughly 41,000 MWH annually that are eligible to be counted as commercial DG. If these 4 wholesale purchases were counted toward UNS' commercial DG requirements, it would result in 5 UNS needing significantly less other commercial DG. Staff thus recommends that UNS report the 6 allowable amount of wholesale DG as commercial DG for purposes of compliance with the REST 7 rules. To the extent the Commission wishes to fund additional commercial DG projects in light of 8 the size of the wholesale DG component eligible to be counted as commercial DG, such 9 commercial DG projects can be given funding.

32. Industry representatives have expressed concern that with the structure of the REST
rules, there may be a significant drop in the amount of DG required in upcoming years. This is
fundamentally a result of the design of the REST rules, where the percentage of DG required
grows through 2012, increasing from 5 percent in 2007 to 30 percent in 2012 and years thereafter.
The solar industry has, in effect, become reliant on the annual 5 percent per year increase in the
DG portion of the REST requirements built into the REST rules through 2012, providing a
relatively steady opportunity for more DG projects each year.

17 33. In comparison, the overall REST requirements increased by 0.25 percent per year 18 through 2009, by 0.5 percent per year from 2010 to 2015, and by 1.0 percent per year from 2016 19 through 2025. The solar industry's big concern is that the DG component's percentage of overall 20 requirements stops growing before the overall REST component starts growing at the 1.0 percent 21 rate, resulting in a smaller increment of DG requirements from 2013 to 2015. The table below 22 shows the overall REST requirements by year and the DG requirements by year.

Year	<b>Overall REST Requirement</b>	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%
	2006 2007 2008 2009 2010 2011 2011 2012	2006         1.25%           2007         1.50%           2008         1.75%           2009         2.0%           2010         2.5%           2011         3.0%           2012         3.5%

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1	2014	4.5%	30%
-	2015	5.0%	30%
2	2016	6.0%	30%
3	2017	7.0%	30%
5	2018	8.0%	30%
4	2019	9.0%	30%
	2020	10.0%	30%
5	2021	11.0%	30%
6	2022	12.0%	30%
0	2023	13.0%	30%
7	2024	14.0%	30%
	After 2024	15.0%	30%

8

9 34. The September 13, 2011 comments from the Southern Arizona Solar Standards 10 Board ("SASSB") in Docket No. E-01933A-11-0269, regarding TEP's 2012 REST plan, contains 11 a graph on the front page which illustrates the dip in commercial DG requirements under the REST 12 rules for the 2013 to 2015 period. The next page of the SASSB comments shows a second graph, 13 reflecting a proposal by SASSB to shift some portion of DG requirements further in the future into 14 the 2013-2015 period to at least partially fill in the dip shown for that period. Concerns with not 15 taking action to fill in the 2013-2015 dip include possibly significant declines in installations and 16 industry activity during that period. Staff would note that this issue has existed since the time the 17 REST rules were created and nobody in past years has proposed scaling back the amount of DG in 18 prior years to save some portion of those DG requirements to fill in the 2013-2015 dip. · 19 Importantly, this is not an issue that impacts the 2012 REST plans, as 2012 sees another 5 percent 20 step up in the DG portion of the full REST requirements. While Staff believes that this is an issue 21 of importance to the solar industry, it is not an issue that needs to be addressed in the 22 Commission's consideration of the 2012 REST plans. Staff thus recommends that UNS, when it 23 files its proposed 2013 REST plan in mid-2012, include a discussion of this issue in its filing and 24 make a proposal as to whether UNS believes the Commission should take action beyond what is 25 required in the REST rules to address the 2013-2015 dip.

<sup>26</sup> Staff Proposed 2012 UFI Incentive Levels

27 35. UNS' filing proposed a residential DG UFI of \$1.60 for non-leased systems and
28 \$1.00 for leased systems. UNS is further proposing a commercial UFI of \$1.30 for commercial

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1 DG systems. Staff would note that, as discussed earlier in the Staff report, Staff is not proposing 2 separate residential UFI levels for leased and non-leased systems. Information UNS from indicates that leased system applications are now occurring in both the residential and commercial 3 DG sectors. As noted above, APS' Rapid Reservation Program has been having significant 4 participation through 2011 at the \$1.00 per watt UFI level. UNS' application in this proceeding 5 contemplates an incentive level of \$1.00 per watt for leased residential DG UFI projects. Thus, 6 7 Staff believes that there are multiple indications that a \$1.00 per watt incentive level may result in 8 significant participation in UNS' market in 2012. Thus, Staff is proposing a residential DG UFI 9 level of \$1.00 per watt in 2012. Staff is proposing the same \$1.00 per watt UFI level for 10 commercial DG projects in UNS' market in 2012. A side benefit of lowering UNS' proposed 11 \$1.50 per watt commercial DG UFI to the \$1.00 per watt level proposed by Staff is that any funds 12 allocated toward the commercial DG UFI will stretch further, resulting in more commercial DG installations in 2012. 13

36. UNS' July 1, 2011 filing contains trigger proposals for the residential and 14 15 commercial DG UFI incentive levels if participation exceeds 60 percent compliance on or before June 30, 2012, as UNS' 2011 triggers operated. In UNS' initial filing, the residential incentive 16 17 trigger would result in a reduction to \$1.35 per watt if the trigger were reached. The commercial incentive trigger would result in a reduction to \$1.05 per watt if the trigger is reached. UNS' 2011 18 19 REST plan is the first REST plan to contain such triggers, but neither trigger was reached in 2011. 20 Staff believes that the trigger concept merits continuation, albeit at adjusted levels to reflect Staff's 21 proposed lower UFI levels and with an additional trigger date. Staff believes that the trigger 22 mechanism needs to be more aggressive, given that funds tend to run out later in the year and there 23 may be further reductions in the cost of renewable resources as the year progresses. Staff is 24 proposing three separate triggers.

37. Thus, under Staff's proposal for residential DG, the UFI would be reduced to \$0.85
per watt if 45 percent compliance is reached on or before June 30, 2012. In like manner, for
commercial DG, the UFI would be reduced to \$0.85 per watt if 45 percent compliance is reached
on or before June 30, 2012. The second triggers for both residential and commercial DG would, if

1 the June 30, 2012 trigger had been reached, reduce the incentive to \$0.70 per watt if 70 percent or 2 more of the incentive funding is reserved prior to September 30, 2012. If the June 30, 2012 trigger 3 has not been reached, then the second trigger would reduce the incentive to \$0.85 per watt. The 4 third trigger would involve a step-down in the incentive level if 90 percent compliance is reached 5 on or before November 30, 2011. The incentive would then be reduced to \$0.50 per watt if both 6 previous triggers were reached, \$0.70 per watt if one previous trigger was reached, and \$0.85 per 7 watt if no previous triggers were reached in 2012. The chart below lays out how the overall trigger 8 mechanism would work.

Date of Trigger	Compliance Level to Activate Trigger	Incentive Level If Trigger Activated
June 30, 2011	45%	\$0.85 per watt
September 30, 2011	70%	\$0.85 per watt if June 30 trigger was not activated. \$0.70 per watt if June 30 trigger was activated.
November 30, 2011	90%	\$0.85 per watt if no previous 2012 triggers activated. \$0.70 if one previous 2012 trigger activated. \$0.50 per watt if both previous 2012 triggers activated.

17 38. On the day that any trigger is activated, UNS will notify the solar industry by e-mail 18 and UNS will provide a similar notice on its website. The mechanics of the residential and 19 commercial triggers would include timely notification to the Commission and installers if the 20 trigger is reached. As well, Staff recommends that UNS post information on its own website, and 21 on the Arizonagoessolar.org website at least every two weeks, regarding its progress toward 22 reaching the triggers.

23

At the Commission's October 11, 2011 Open Meeting, there was discussion 39. 24 regarding TEP's commitment to providing additional funding at current incentive levels to 75 25 customers even after the approved budget for residential DG was fully depleted. Staff is 26 concerned that such events could occur for UNS. Thus, Staff recommends that UNS not commit 27 to or expend any further ratepayers funds for UFI or PBI incentives once a given year's approved 28 level of funds is depleted, absent approval from the Commission for such action.

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1 2012 REST Plan Overall Budget Options

40. The table below shows proposed spending levels by area for UNS' proposed 2012REST budget options and Staff's proposed 2012 REST budget options.Budget Components2012 UNS Proposal2012 Staff Option 12012 Staff Option 2Purchased Renewable

		-k		
~	Purchased Renewable			
5	Energy		· · · · · · · · · · · · · · · · · · ·	
6	Above market cost of conventional	\$2,126,470	\$2,126,470	\$2,126,470
7	generation			
	UNS Owned	\$665,169	\$332,585	\$332,585
8	Subtotal	\$2,791,639	\$2,459,055	\$2,459,055
9	Customer Sited Distributed			
10	Renewable Energy			
11	Up-front incentive – residential	\$2,644,741	\$1,752,337	\$1,752,337
12	Up-front incentive – commercial	\$971,584	\$691,614	\$286,803
13	Annual Performance- Based Incentive	\$1,837,072	\$1,837,072	\$1,709,178
14	(PBI) Meter Reading	\$6,250	\$6,250	\$6,250
15	Marketing	\$100,000	\$10,000	\$10,000
16	Subtotal	\$5,559,647	\$4,297,273	\$3,764,568
	Technical Training	<i>\$0,007,017</i>	<i>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</i>	φ5,704,500
17	Schools Program	\$300,000	\$190,000	\$190,000
18	Internal and	\$50,000	\$37,500	\$37,500
10	Contractor Training			401,000
19	Subtotal	\$350,000	\$227,500	\$227,500
ľ	Information Systems			
20	Subtotal	\$100,000	\$50,000	\$50,000
21	Metering			
21	Subtotal	\$76,060	\$0	\$0
22 🛛	Labor and			
	Administration			
	Labor, Materials, Supplies	\$290,529	\$252,750	\$252,750
24	AZ Solar Website	\$1,000	\$1,000	\$1,000
25	Subtotal		\$253,750	\$253,750
	Research and		······································	
26	Development			
~ 1	AZRISE	\$50,000	\$20,000	\$20,000
27	Dues and Fees	\$15,000	\$7,500	\$7,500
28	Subtotal	\$65,000	\$27,500	\$27,500

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Fotal Spending	\$9,233,874	\$7,31	5,078	\$6,782,373	
UnderRecovered	\$242,841	\$0		\$0	
2010 Funds					
Total Amount for	\$9,476,715	\$7,315	5,078	\$6,782,373	
Recovery			· · · · · · · · · · · · · · · · · · ·		
Recovery of Fund	ds Through 2012 R	EST Charge			
41 50		1 1 1 17 1			
41. UN	IS' proposed caps a	nd per kwn char	ge are designed	to recover UNS' pro	
recovery amount	of \$9.5 million. S	taff's proposed o	aps and per kW	/h charge are desig	
naaarian Staffa mu	anagad hudgat of \$7	2 million and \$4	0 million for th	a taxa antiana muari	
recover Starr's pro	oposed budget of \$7	.5 million and \$0	5.8 million for un	e two options provid	
Staff.					
	- toblo holor	the mean and	mahanaa	h for acch IDIO	
42. The	e table below shows	s the proposed st	ircharge per kw	n for each UNS and	
option as well as t	the proposed caps ur	der each option,	in comparison to	what is currently in	
for 2011.					
tor 2011.			•		
4127	2011 Approved	2012 UNS	2012 Staff	2012 Staff	
		Proposal	Option 1	<b>Option 2</b>	
REST Charge	\$0.008315	\$0.010259	\$0.007795	\$0.007597	
(per kWh)					
Class Caps					
Residential	\$5.00	\$6.00	\$4.50	\$4.00	
a	\$160.00	\$192.00	\$150.00	\$140.00	
Commercial	\$5,000.00	\$6,000.00	\$5,500.00	\$5,000.00	
Commercial Industrial and	\$5,000.00			4	
Industrial and	\$140.00	\$192.00	\$135.00	\$130.00	
Industrial and Mining Lighting 43. The	\$140.00 e cost recovery by JNS and Staff optior	\$192.00 customer class as for the 2012 RI	for the approv EST plan are sho	ed 2011 REST pla	
Industrial and Mining Lighting 43. The	\$140.00 e cost recovery by JNS and Staff option 2011 REST	\$192.00 customer class as for the 2012 RI 2012 UNS	for the approv EST plan are sho 2012 Staff	ed 2011 REST pla wn in the table below 2012 Staff	
Industrial and <u>Mining</u> Lighting 43. The estimates for the U	\$140.00 e cost recovery by JNS and Staff optior 2011 REST Plan	\$192.00 customer class as for the 2012 RH 2012 UNS Proposal	for the approv EST plan are sho 2012 Staff Option 1	ed 2011 REST pla wn in the table belov 2012 Staff Option 2	
Industrial and Mining Lighting 43. The	\$140.00 e cost recovery by JNS and Staff option 2011 REST Plan \$4,178,457	\$192.00 customer class as for the 2012 RI 2012 UNS Proposal \$4,670,642	for the approv EST plan are show 2012 Staff Option 1 \$3,505,153	ed 2011 REST pla wn in the table belov 2012 Staff Option 2 \$3,153,976	
Industrial and Mining Lighting 43. The estimates for the U Residential	\$140.00 e cost recovery by JNS and Staff option 2011 REST Plan \$4,178,457 (51.8%)	\$192.00 customer class as for the 2012 RH 2012 UNS Proposal \$4,670,642 (49.2%)	for the approve EST plan are show 2012 Staff Option 1 \$3,505,153 (47.9%)	ed 2011 REST pla wn in the table below 2012 Staff Option 2 \$3,153,976 (46.5%)	
Industrial and <u>Mining</u> Lighting 43. The estimates for the U	\$140.00 e cost recovery by JNS and Staff option 2011 REST Plan \$4,178,457 (51.8%) \$2,858,280	\$192.00 customer class as for the 2012 RI 2012 UNS Proposal \$4,670,642 (49.2%) \$3,517,501	for the approve EST plan are show 2012 Staff Option 1 \$3,505,153 (47.9%) \$2,694,023	ed 2011 REST pla wn in the table below 2012 Staff Option 2 \$3,153,976 (46.5%) \$2,589,336	
Industrial and Mining Lighting 43. The estimates for the U Residential Commercial	\$140.00 e cost recovery by JNS and Staff option 2011 REST Plan \$4,178,457 (51.8%) \$2,858,280 (35.4%)	\$192.00 customer class as for the 2012 RH 2012 UNS Proposal \$4,670,642 (49.2%) \$3,517,501 (37.1%)	for the approve EST plan are show 2012 Staff Option 1 \$3,505,153 (47.9%) \$2,694,023 (36.8%)	ed 2011 REST pla wn in the table below 2012 Staff Option 2 \$3,153,976 (46.5%) \$2,589,336 (38.2%)	
Industrial and Mining Lighting 43. The estimates for the U Residential Commercial Industrial and	\$140.00 e cost recovery by JNS and Staff option 2011 REST Plan \$4,178,457 (51.8%) \$2,858,280 (35.4%) \$1,021,285	\$192.00 customer class as for the 2012 RH 2012 UNS Proposal \$4,670,642 (49.2%) \$3,517,501 (37.1%) \$1,289,076	for the approve EST plan are show 2012 Staff Option 1 \$3,505,153 (47.9%) \$2,694,023 (36.8%) \$1,111,080	ed 2011 REST pla wn in the table below 2012 Staff Option 2 \$3,153,976 (46.5%) \$2,589,336 (38.2%) \$1,034,273	
Industrial and Mining Lighting 43. The estimates for the U Residential Commercial	\$140.00 e cost recovery by JNS and Staff option 2011 REST Plan \$4,178,457 (51.8%) \$2,858,280 (35.4%) \$1,021,285 (12.7%)	\$192.00 customer class as for the 2012 RH 2012 UNS Proposal \$4,670,642 (49.2%) \$3,517,501 (37.1%) \$1,289,076 (13.6%)	for the approve EST plan are show 2012 Staff Option 1 \$3,505,153 (47.9%) \$2,694,023 (36.8%) \$1,111,080 (15.2%)	ed 2011 REST pla wn in the table below 2012 Staff Option 2 \$3,153,976 (46.5%) \$2,589,336 (38.2%) \$1,034,273 (15.3%)	
Industrial and Mining Lighting 43. The estimates for the U Residential Commercial Industrial and	\$140.00 e cost recovery by JNS and Staff option <b>2011 REST</b> <b>Plan</b> \$4,178,457 (51.8%) \$2,858,280 (35.4%) \$1,021,285 (12.7%) \$6,115	\$192.00 customer class as for the 2012 RH 2012 UNS Proposal \$4,670,642 (49.2%) \$3,517,501 (37.1%) \$1,289,076 (13.6%) \$7,304	for the approve EST plan are show 2012 Staff Option 1 \$3,505,153 (47.9%) \$2,694,023 (36.8%) \$1,111,080 (15.2%) \$5,094	ed 2011 REST pla wn in the table below 2012 Staff Option 2 \$3,153,976 (46.5%) \$2,589,336 (38.2%) \$1,034,273 (15.3%) \$4,964	
Industrial and Mining Lighting 43. The estimates for the U Residential Commercial Industrial and Mining	\$140.00 e cost recovery by JNS and Staff option 2011 REST Plan \$4,178,457 (51.8%) \$2,858,280 (35.4%) \$1,021,285 (12.7%)	\$192.00 customer class as for the 2012 RH 2012 UNS Proposal \$4,670,642 (49.2%) \$3,517,501 (37.1%) \$1,289,076 (13.6%)	for the approve EST plan are show 2012 Staff Option 1 \$3,505,153 (47.9%) \$2,694,023 (36.8%) \$1,111,080 (15.2%)	ed 2011 REST pla wn in the table below 2012 Staff Option 2 \$3,153,976 (46.5%) \$2,589,336 (38.2%) \$1,034,273 (15.3%)	

Page 18 Docket No. E-04204A-11-0267 1 44. For comparison purposes, the table below shows the projected MWH sales by 2 customer class for 2012. 3 **2012 Projected Sales Customer Class** (MWH) 4 Residential 856,778 (44.0%) 621,767 (31.9%) Commercial 5 Industrial and Mining 467,519 (24.0%) Lighting 3,127 (0.2%) 6 Total 1,949,192 7 8 45. The table below shows the contribution, per kWh consumed, for each customer 9 class (projected class cost recovery divided by projected class kWh sales). The table thus provides 10 a comparison of the relative contribution to REST funding by each customer class on a per kWh 11 basis. Staff's proposal for class caps and the per kWh charge is intended to gradually move the 12 customer classes closer to one another in terms of their contribution per kWh consumed in each 13 customer class. 14 Contribution 2011 REST Plan 2012 UNS 2012 Staff 2012 Staff by Customer (per kWh) **Proposal Option 1 Option 2** 15 Class (per kWh) (per kWh) (per kWh) (per kWh) 16 Residential \$0.0051 \$0.0055 \$0.0041 \$0.0037 17 Commercial \$0.0046 \$0.0057 \$0.0043 \$0.0042 Industrial/ \$0.0022 \$0.0028 \$0.0024 \$0.0022 18 Mining Lighting \$0.0072 \$0.0023 \$0.0016 \$0.0016 19 46. The table below shows the average REST charge by customer class as well as the 20 percentage of customers at the cap for each customer class. 21 47. 22 **2012 UNS Proposal** 2012 Staff Option 1 2012 Staff Option 2 23 Residential -\$4.84 \$3.64 \$3.28 Average Bill 24 Commercial -\$30.18 \$22.76 \$21.88 Average Bill 25 Industrial and \$4,475.96 \$3,857.92 \$3,591.23 26 Mining -Average Bill 27 Lighting -\$2.28 \$2.23 \$2.17 Average Bill 28

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-						
Residential – 70.6%		, ",	70.6%		70.6%	
Percent at Cap						
Commercial – 5.0%			5.0%		5.0%	
Percent at Cap						
Industrial and	50.4%		46.2%		47.9%	
Mining – Percent						
at Cap					•	.4
Lighting –	0.1%		0.1%		0.1%	
Percent at Cap		4				
48. Estir able below.	nated custor	ner bill imp	acts for vario	us monthly cor	nsumptions are	shown in
		kWh /	2011	2012	2012	2012
Custor	mer Types	к w II / mo.	REST	UNS	Staff	Staff
		шо.	Plan	Proposal	Option 1	Option
Residence Cons	uming 400 kWh	400	\$3.33	\$4.10	\$3.13	\$3.05
Residence Cons	uming 890 kWh	890	\$5.00	\$4.84	\$4.50	\$4.00
Residence Consur	ning 2,000 kWh	2,000	\$5.00	\$6.00	\$4.50	\$4.00
Der	ntist Office	2,000	\$16.63	\$20.52	\$15.64	\$15.24
	Hairstylist	3,900	\$32.43	\$40.01	\$30.50	\$29.73
Depart	ment Store	170,000	\$160.00	\$192.00	\$150.00	\$140.00
	Mall	1,627,10 0	\$160.00	\$192.00	\$150.00	\$140.00
Retail V	video Store	14,400	\$119.74	\$147.73	\$112.62	\$109.76
	arge Hotel	1,067,10	\$160.00	\$192.00	\$150.00	\$140.00
Large Build	ing Supply	346,500	\$160.00	\$192.00	\$150.00	\$140.00
	Iotel/Motel	27,960	\$160.00	\$192.00	\$150.00	\$140.00
	Fast Food	60,160	\$160.00	\$192.00	\$150.00	\$140.00
Large High Rise (		1,476,10 0	\$160.00	\$192.00	\$150.00	\$140.00
Hospital	. (< 3 MW)	1,509,60 0	\$5,000.00	\$6,000.00	\$5,500.00	\$5,000.0
Si	upermarket	233,600	\$160.00	\$192.00	\$150.00	\$140.00
	ience Store	20,160	\$160.00	\$192.00	\$150.00	\$140.00
	(> 3 MW)	2,700,00	\$5,000.00	\$6,000.00	\$5,500.00	\$5,000.0

72,000,0 00

0

Hospital (> 3 MW)

Copper Mine

\$5,000.00

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25

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Decision No.

\$6,000.00

\$5,500.00

\$5,500.00

\$5,000.00

\$5,000.00

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49. 1 Staff recommends approval of the proposed Staff Option 1. Staff believes that this 2 recommendation provides adequate funding to more efficiently achieve UNS' 2012 REST goals 3 and even exceed its commercial DG requirement. Staff Option 1 also provides a reduction in the 4 budget both from the 2011 approved REST plan budget and UNS' proposals for the 2012 REST 5 plan budget. Staff recognizes that the Commission could select Staff Option 2 and still expect to 6 meet the commercial DG requirement for 2012, but Staff believes there is value to providing a 7 more significant level of funding for commercial DG projects, recognizing that during next year's 8 consideration of UNS' 2013 REST plan, there is likely to be further consideration of the dip in 9 new incremental DG required in 2013-2015 as well as potential commercial DG overcompliance.

# 10

# Staff's Concerns About REST Plan Formats

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

18 51. In order for the public and the Commission to better understand the Utility Plans 19 and Compliance Reports, Staff believes that the utilities should work cooperatively to develop a 20 template for detailed spreadsheets that viewers can download and work with to explore alternative 21 scenarios. The detailed spreadsheets shall be in native format, including the assumptions used by 22 the utilities and the data to support the utility calculations. Care must be taken to protect 23 competitively confidential information, so that information would be blacked out in the public 24 version.

52. Staff recommends that the Commission order UNS to work with Arizona Public
Service Company and Tucson Electric Power Company in an effort to establish a REST Format
Working Group that would meet periodically with all other utility representatives to develop
standardized template formats for both REST Implementation Plans and REST Compliance

1 Reports. Staff recognizes that each utility is unique in a number of ways, so Staff suggests that templates have two parts: mandatory information and optional/other information. The first part 2 would be detailed and identical in format. The second part would be an optional portion with a 3 4 flexible format that would vary by utility. The Working Group would solicit input, suggestions, and detailed recommendations for stakeholders and the general public. In addition to developing 5 the templates of Implementation Plans and Compliance Reports, the Working Group would 6 7 develop templates for detailed spreadsheets that would be made available to the public on both the utility website and the ArizonaGoesSolar.org website. 8

9 53. The Working Group should submit to the Commission a report with its 10 recommendations no later than September 1, 2012, for Staff approval. The effective date for usage 11 of the templates would be April 1, 2013, for the 2012 Compliance Reports and July 1, 2013, for 12 the 2014 REST Implementation Plans.

13 Staff Recommendations

Staff has recommended that the Commission approve the Staff proposed Option 1
for the 2012 REST plan, reflecting a REST charge of \$0.007795 per kWh, and related caps
reflected in the Staff proposal. This includes total spending and a total budget of \$6,782,550.

17 55. Staff has further recommended that the residential PV Up-Front Incentive be set at
18 \$1.00 per watt on January 1, 2012.

19 56. Staff has further recommended that the non-residential Up-Front Incentive be set at
20 \$1.00 per watt.

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

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

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1 59. Staff has further recommended that in regard to the Bright Arizona Buildout Plan in 2 the 2012 REST plan budget, UNS be allowed to recover half of its requested recovery amount, \$332,585, through the 2012 REST surcharge. 3 60. Staff has further recommended that in regard to REST plan budgets in 2013 and 4 5 beyond, that UNS not be allowed to recover costs from the Bright Arizona Buildout Plan, but rather should seek recovery of those costs in the next general rate proceeding. 6 7 Staff has further recommended that UNS' Buildout Program for 2012 be approved, 61. 8 but that approval should not be granted for future years. Rather, UNS should seek approval for 9 further years of the buildout plan as part of the Company's seeking of Commission approval for 10 future annual REST plans. 62. Staff has further recommended that reasonableness and prudency of buildout plan 11 12 costs be examined in UNS' next rate case and that any costs determined not to be reasonable and prudent be refunded by the Company. 13 14 63. Staff has further recommended that in future REST plans, the burden of proof will 15 be borne by UNS to justify the use of ratepayer funds to pay for marketing if UNS proposes to use ratepayer funds for marketing in future REST plans. 16 17 64. Staff has further recommended approval of UNS' proposed research and 18 development projects and funding as modified by Staff herein. 19 65. Staff has further recommended reducing the maximum percentage of a project that 20 can be paid for with utility incentives to 40 percent. 21 66. Staff has further recommended that the Commission not differentiate between 22 leased and non-leased systems in setting DG UFIs for UNS' 2012 REST plan. 23 67. Staff has further recommended that UNS report the total allowable amount of wholesale DG as commercial DG for purposes of compliance with the REST rules. 24 68. 25 Staff has further recommended s that UNS post information on its own website, and on the Arizonagoessolar.org website at least every two weeks, regarding its progress toward 26 27 reaching the triggers. 28 . . . Decision No.

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1	69. Staff has further recommended approval of the School Vocational	Program, as						
2	discussed herein.							
3	70. Staff has further recommended that UNS not commit to or expendence	l any further						
4	ratepayer funds for UFI or PBI incentives once a given year's approved level of funds is depleted,							
5	absent approval from the Commission for such action.							
6	71. Staff has further recommended approval of the formation of the R	EST Format						
7	Working Group as discussed herein. UNS and other utilities would submit the Work	king Group's						
8	report and recommendations by September 1, 2012, for Staff approval.							
9	72. Staff has further recommended that UNS file the REST-TS1, consis	tent with the						
10	Decision in this case, within 15 days of the effective date of the Decision.							
11	CONCLUSIONS OF LAW							
12	1. UNS is an Arizona public service corporation within the meaning of	Article XV,						
13	Section 2, of the Arizona Constitution.							
14	2. The Commission has jurisdiction over UNS and over the subject n	natter of the						
15	application.							
16	3. The Commission, having reviewed the application and Staff's Memor	andum dated						
17	October 25, 2011, concludes that it is in the public interest to approve the UNS 2012	2 Renewable						
18	Energy Standard and Tariff Implementation Plan as discussed herein.							
19	ORDER							
20	IT IS THEREFORE ORDERED that the Staff Option 1 for the UNS Electric	ic, Inc. 2012						
21	REST Implementation Plan, reflecting a REST charge of \$0.007795 per kWh, and	related caps						
22	reflected in the Staff proposal be and hereby is approved. This includes total spendin	ig and a total						
23	budget of \$6,782,550.							
24	IT IS FURTHER ORDERED that the residential PV Up-Front Incentive be set	at \$1.00 per						
25	watt on January 1, 2012.							
26	IT IS FURTHER ORDERED that the non-residential Up-Front Incentive be	set at \$1.00						
27	per watt.							
28								
	Decision No							

- IT IS FURTHER ORDERED that the upper limit for non-residential Production Based 1 2 Incentives be set at \$0.125 per kWh for 70-200 kW systems, \$0.105 per kWh for 201-400 kW systems and \$0.091 per kWh for 401 kW or higher systems.
- 3

4 IT IS FURTHER ORDERED that for residential DG, the UFI shall be reduced from \$1.00 per watt to \$0.85 per watt if 45 percent of the incentive funding is reserved on or before June 30, 5 6 2012. In like manner, for commercial DG, the UFI shall be reduced to \$0.85 per watt if 45 percent 7 of the incentive funding is reserved on or before June 30, 2012. The second triggers for both 8 residential and commercial DG shall, if the June 30, 2012 trigger is reached, reduce the incentive 9 to \$0.70 per watt if 70 percent or more of the incentive funding is reserved prior to September 30, 10 2012. If the June 30, 2012 trigger is not reached, then the second trigger shall reduce the incentive 11 to \$0.85 per watt. The third trigger shall reduce the incentive level if 90 percent of the incentive 12 funding is reserved on or before November 30, 2011. The incentive shall then be reduced to \$0.50 13 per watt if both previous triggers are reached, \$0.70 per watt if one previous trigger is reached, and \$0.85 per watt if no previous triggers are reached in 2012. 14

15 IT IS FURTHER ORDERED that UNS Electric, Inc. shall post information on its own website, and on the Arizonagoessolar.org website at least every two weeks, regarding its progress 16 17 toward reaching the triggers.

18 IT IS FURTHER ORDERED that in regard to the Bright Arizona Buildout Plan in the 19 2012 REST plan budget, UNS Electric, Inc. is allowed to recover \$332,585, through the 2012 REST surcharge. 20

21 IT IS FURTHER ORDERED that in regard to REST plan budgets in 2013 and beyond, that 22 UNS Electric, Inc. shall not be allowed to recover costs from the Bright Arizona Buildout Plan, but 23 may seek recovery of those costs in the next general rate proceeding.

24 IT IS FURTHER ORDERED that UNS Electric, Inc.'s Buildout Program for 2012 be and 25 hereby is approved, but that approval shall not be granted for future years. UNS Electric, Inc. may 26 seek approval for further years of the buildout plan as part of UNS Electric, Inc.'s seeking of 27 Commission approval for future annual REST plans.

28 . . .

1 IT IS FURTHER ORDERED that reasonableness and prudency of buildout plan costs be 2 examined in UNS Electric, Inc.'s next rate case and that any costs determined not to be reasonable 3 and prudent be refunded by UNS Electric, Inc. 4 IT IS FURTHER ORDERED that in future REST plans, the burden of proof will be borne 5 by UNS Electric, Inc. to justify the use of ratepayer funds to pay for marketing if UNS Electric, 6 Inc. proposes to use ratepayer funds for marketing in future REST plans. 7 IT IS FURTHER ORDERED that UNS Electric, Inc.'s proposed research and development 8 projects and funding be and hereby is approved as discussed herein. IT IS FURTHER ORDERED that the maximum percentage of a project that can be paid 9 10 for with utility incentives be 40 percent. 11 IT IS FURTHER ORDERED that there shall not be a differentiation between leased and 12 non-leased systems in setting DG UFIs for UNS Electric, Inc.'s 2012 REST plan. 13 IT IS FURTHER ORDERED that UNS Electric, Inc. report the total allowable amount of 14 wholesale DG as commercial DG for purposes of compliance with the REST rules. 15 IT IS FURTHER ORDERED that the School Vocational Program be and hereby is 16 approved as discussed herein. 17 IT IS FURTHER ORDERED that UNS Electric, Inc. not commit to or expend any further 18 ratepayer funds for UFI or PBI incentives once a given year's approved level of funds is depleted, 19 absent approval from the Commission for such action. 20 IT IS FURTHER ORDERED that the formation of the REST Format Working Group be 21 and hereby is approved as discussed herein. UNS Electric, Inc. shall submit the Working Group's 22 report and recommendations by September 1, 2012, for Staff approval. 23 . . . 24 . . . 25 26 27 28 Decision No.

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1	IT IS FURTHER ORDERED that	UNS Electric, Inc. file the REST-TS1, consistent	with			
2	the Decision in this case, within 15 days of the effective date of the Decision.					
3	IT IS FURTHER ORDERED that the	his Decision become effective immediately.				
4						
5	BY THE ORDER OF THE AR	IZONA CORPORATION COMMISSION				
6						
7	CHAIRMAN	COMMISSIONER				
8		· · · · · · · · · · · · · · · · · · ·				
9						
10	COMMISSIONER COMM	MISSIONER COMMISSIONE	R			
11	-	WITNESS WHEREOF, I, ERNEST G. JOHNS	ION			
12	Exe	ecutive Director of the Arizona Corpor	ation			
13	offi	mmission, have hereunto, set my hand and cause icial seal of this Commission to be affixed a	t the			
14	of	pitol, in the City of Phoenix, this, 2011.	_day			
15						
16						
17 18	ERI	NEST G. JOHNSON ECUTIVE DIRECTOR				
18		LCOTIVE DIRECTOR				
20	DISSENT:					
21						
22	DISSENT:					
23	SMO:RGG:lhm\RM					
24						
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27						
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1	SERVICE LIST FOR: UNS Electric, Inc. DOCKET NO. E-04204A-11-0267	
2		
3	Mr. Daniel Pozefsky	
4	1110 West Washington Phoenix, Arizona 85007	
5	Mr. Court Rich	
6	6613 North Scottsdale Road, Suite 200 Scottsdale, Arizona 85250	
7 8	Mr. Philip Dion	
8 9	Unisource Energy Corporation One South Church Avenue, Suite 200	
9 10	Tucson, Arizona 85701	
11	Mr. Michael Patten	
12	Roshka, DeWulf & Patten, PLC One Arizona Center	
13	400 East Van Buren Street, Suite 800 Phoenix, Arizona 85004	
14	Mr. Steven M. Olea	
15	Director, Utilities Division Arizona Corporation Commission	
16	1200 West Washington Street Phoenix, Arizona 85007	
17	Ms. Janice M. Alward	
18	Chief Counsel, Legal Division Arizona Corporation Commission	
19 20	1200 West Washington Street Phoenix, Arizona 85007	
20 21	Phoenix, Arizona 85007	
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