

**ORIGINAL**  
**OPEN MEETING**



0000119864

**MEMORANDUM**

Arizona Corporation Commission

**DOCKETED**

NOV - 8 2010

**RECEIVED**

2010 NOV -8 P 2:44

AZ CORP COMMISSION  
DOCKET CONTROL

TO: THE COMMISSION

FROM: Utilities Division

DATE: November 8, 2010

DOCKETED BY

RE: UNS ELECTRIC, INC. - APPLICATION FOR APPROVAL OF ITS 2011 RENEWABLE ENERGY STANDARD AND TARIFF IMPLEMENTATION PLAN (DOCKET NO. E-04204A-10-0265)

On July 1, 2010, UNS Electric, Inc. ("UNS" or "Company") filed for Commission approval of its 2011 Renewable Energy Standard and Tariff ("REST") Implementation Plan. On October 13, 2010, UNS filed an update to its proposed REST Implementation Plan. There have been no filings for intervention or comments filed in the docket to date.

UNS' initial filing requests approval of various REST plan components, including a budget, incentive levels, recovery of lost net revenue, customer class caps, various program details, a Bright Arizona Community Solar Program, a Bright Arizona Solar Buildout Plan, a School Vocational Program, a Feed-in Tariff Pilot Program, an incentive tied to UNS' Energy Efficiency Audit Program, and approval of research and development funding for 2011. The initial filing also cites the Zero-Net Energy Homes Pilot Program, but UNS is not requesting any action regarding this program in this proceeding.

UNS' plan update, filed on October 13, 2010, proposes changes to the incentive levels, budget levels, customer class caps, and other related issues. The plan withdraws UNS' request for a REST incentive tied to its Energy Efficiency Audit program.

**Recovery of Lost Net Fixed Revenue for DG Projects**

UNS' proposed budget includes \$73,752 for recovery of lost net revenue related to DG implemented through the REST plan. The Commission has not granted lost net revenues as a result of DG deployments to any utility in Arizona and specifically rejected UNS' request for DG lost net revenue in relation to UNS' 2010 REST plan. UNS' application does not make any case for inclusion of lost net revenue, other than inclusion of the line item in the budget. Staff recommends that the Commission not approve UNS' request for recovery of possible lost net revenue resulting from DG deployments.

**UNS REST Experience Under 2010 REST Plan**

The Commission-approved implementation plan for 2010 contemplated a budget of \$8.7 million. Approximately \$0.9 million in leftover 2008 REST funds were used to help fund the 2010 REST budget. UNS projects that it will spend its entire REST budget in 2010.

Regarding installations and reservations, the table below summarizes installations through September 2010 and reservations for future installations.

Residential	Photovoltaics		Solar Hot Water	
	Number of Systems	kW	Number of Systems	kWh
2010 Installations	246	1,557	85	233,750
Reservations	230	1,687	20	55,000

Commercial	Photovoltaics		Solar Hot Water	
	Number of Systems	kW	Number of Systems	kWh
2010 Installations	26	313	0	0
Reservations	33	1,245	0	0

Wind	Residential		Commercial	
	Number of Systems	kW	Number of Systems	kWh
2010 Installations	34	73	0	0
Reservations	11	18	0	0

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 also the systems that are reserved, but have not yet been installed.

	Required (MWh)	Produced/Banked (MWh)
Residential DG	4,620	4,398 (installed – annualized) 5,420 (installed – annualized/reserved)
Commercial DG	4,620	561 (installed – annualized) 5,578 (installed – annualized/reserved)
Non-DG	36,963	5,545

### **School Vocational Program**

UNS is proposing a new School Vocational Program ("SVP") that would involve the deployment of three PV systems at high schools within UNS' service territory. UNS would work with school officials to determine good candidates for participation in the program, based on the appropriateness of the site for a PV deployment as well as the school's ability to create an on-going vocational training program in collaboration with UNS. The program budget is \$154,000, including \$75,000 for equipment and \$79,000 in training and seminar funds.

UNS' sister company, Tucson Electric Power Company ("TEP") has proposed a similar School Vocational Program for its service territory around Tucson. Staff notes that the recently concluded UNS general rate proceeding included an ordering paragraph in the final decision (Decision No. 71914, September 30, 2010) that orders UNS shall: "develop a school-specific renewable program for inclusion in the Company's renewable energy implementation plan . . . ." Staff believes that the best course of action regarding UNS' proposed School Vocational Program is to let TEP test the program in its service territory in 2010, and have UNS recommend whether or not it believes the program should be implemented in its service territory in 2012 as part of its 2012 REST implementation plan. Staff makes this recommendation as part of its effort to reduce the UNS REST budget where possible to try to reduce the customer class caps for UNS as well as the average cost per customer. Staff's proposal reduces the cost for UNS in 2011, while providing the opportunity for the program to be implemented the next year if it is successful for TEP in 2011. Specifically, Staff recommends that as part of UNS' 2012 REST plan filing, the Company review the success of the TEP School Vocational Program and make a proposal in its 2012 REST plan on whether to propose such a program in UNS' service territory for 2012.

### **Bright Arizona Community Solar Program**

UNS is proposing the implementation of a new Bright Arizona Community Solar Program ("Bright Arizona program") in 2011. The Bright Arizona program is patterned after TEP's existing Bright Tucson Community Solar Program ("Bright Tucson program") in some ways. TEP's Bright Tucson Program was approved by the Commission in Decision No. 71835 (August 10, 2010). As with TEP's program, UNS' customers can buy 1 kW blocks which equal 150 kWh of electricity per month. UNS' application indicates in some places that customers would pay a \$0.01 per kWh premium, while in other places the application indicates that there would be a \$0.02 per kWh premium. The Company has indicated to Staff that the \$0.01 per kWh references are in error, and that customers would pay a \$0.02 per kWh premium over the otherwise applicable tariffed rate under UNS' proposal, which is consistent with the premium paid under TEP's program. Under the Company's proposal, the price under the tariff would be fixed for the customer for ten years and Bright Arizona customers would not be subject to fluctuating purchased power adjustor costs that regular tariff customers are exposed to. If purchased kWh under the Bright Arizona program are not used during a month, excess kWh are rolled over into the next month. The non-variable portion of the bill would change if it is changed on the otherwise applicable tariff as a result of a general rate proceeding. In concert

with the Bright Arizona program, UNS is proposing a Bright Arizona Solar Buildout Plan, as discussed below.

UNS is proposing three new tariffs for taking service under the Bright Arizona program, for residential, small general service and large general service. These new tariffs match the existing customer classes for providing general service to residential and commercial customers. The table below reflects the basic rate components for the three rate classes.

	Delivery Charge (per kWh)	Base Power (per kWh)	Total Absent Solar Capacity Charge (per kWh)	Total With \$0.02 per kWh Solar Capacity Charge
Residential (RES-1)	1 <sup>st</sup> 400 kWh – \$0.014507 Above 400 kWh - \$0.27414	\$0.074812	1 <sup>st</sup> 400 kWh – \$0.089319 Above 400 kWh - \$0.102226	1 <sup>st</sup> 400 kWh - \$0.109319 Above 400 kWh - \$0.122226
Small General Service (SGS- 10)	1 <sup>st</sup> 400 kWh – \$0.026756 Above 400 kWh - \$0.038691	\$0.072649	1 <sup>st</sup> 400 kWh – \$0.099405 Above 400 kWh - \$0.111340	1 <sup>st</sup> 400 kWh – \$0.119405 Above 400 kWh - \$0.131340
Large General Service (LGS)	\$0.003871	\$0.064326	\$0.068197	\$0.088197

TEP had recommended separate new tariffs in its application for approval of the Bright Tucson program, a recommendation the Commission rejected. TEP was required to provide a single new rider that would add \$0.02 per kWh to service under an existing tariff. Staff believes UNS' proposal for separate new tariffs should be similarly rejected in favor one rider tariff that adds the \$0.02 per kWh premium to service on a regular existing tariff.

UNS anticipates installation of photovoltaic facilities starting in late 2011 to provide renewable energy for sale under this tariff. UNS has not determined whether renewable energy under this program will be provided through Company-owned facilities, purchased power agreements, or some combination. UNS will market this tariff in conjunction with the permitting and construction schedule for the production facilities to supply Bright Arizona program customers with renewable energy. Projects constructed to serve Bright Arizona customers would count toward UNS' non-DE renewable energy requirement, not its residential or commercial DE requirements. Staff believes that UNS' proposed Bright Arizona program is consistent with the Bright Tucson program the Commission previously approved. Consistent with the Commission's decision on the Bright Tucson program, Staff makes the following recommendations regarding the Bright Arizona program:

1. All adjustors, except the Purchased Power Fuel Adjustor Clause ("PPFAC") and REST, should apply to the solar block energy purchased under the Bright Arizona program.
2. The solar capacity rates of the Bright Arizona program should be fixed for 20 years to reflect the typical length of a Purchased Power Agreement ("PPA").

3. Any excess solar block energy should be purchased back from the customer at the time the customer terminates participation in the program.
4. The program should contain an annual "true-up" accounting provision in October (September usage) to eliminate the possibility of customers accruing an excessive credit.
5. The determination of the reasonableness and prudence of program costs should be reviewed as part of UNS Electric's next rate case.
6. UNS should indicate on the tariff that subscription to the Bright Arizona program is based upon solar generation resources available.
7. UNS should include in its annual REST reports information on the amount (MW) of solar resources available for the Bright Arizona program and the amount (MW) of solar resources subscribed by customers participating in the program.
8. The three proposed solar tariffs should be eliminated in favor of a single "solar" rider attached to the three existing base tariffs listed in the table above (that shall include the Delivery Service and Base Power shown in the table above), using the \$0.02 per kWh solar premium as the rider.

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

UNS is requesting approval of a four year build-out plan for the Bright Arizona Solar program. The Bright Arizona program is being proposed in this proceeding by UNS, as described above.

The buildout plan would involve \$20,000,000 for 5 MW of utility-scale, utility-owned solar installations, with 1.25 MW installed each year from 2011 through 2014, and recovery of carrying costs through the REST charge from 2012 through 2015. Thus UNS is not seeking recovery of any of these costs in the 2011 REST plan, but such recovery would be anticipated to begin with the 2012 REST plan.

No costs related to the buildout plan are being proposed by UNS for recovery in 2011. UNS estimates that the carrying costs to be recovered for the buildout plan beginning in 2012 would be \$665,169 in 2012, \$323,341 in 2013, \$665,169 in 2014, and \$1,293,362 in 2015.

Staff believes that UNS' proposal for the Bright Arizona Solar Buildout Plan is similar to the proposal by Arizona Public Service Company ("APS") for its AZ Sun Program, which was approved by the Commission in Decision No. 71502 (March 17, 2010). UNS' proposal for the build out plan would involve a commitment for the next four years. Staff believes that it is reasonable to approve UNS' proposal for the first year of the buildout plan, but that UNS should seek Commission approval as part of its 2012 REST plan for further years of the buildout plan.

This will provide UNS with the opportunity to gauge success of the first year of the buildout plan and make necessary adjustments. Staff recommends that UNS, as part of its 2012 REST plan filing, report on the status of its buildout plan.

Treatment of the costs for these facilities would mirror the Commission's treatment of APS facilities in Decision No. 71502, namely, Staff recommends that recovery of carrying costs until UNS' next rate case is appropriate and reasonable. Staff further recommends that reasonableness and prudence 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.

### **Research and Development**

UNS is requesting approval of funding of \$50,000 to fund on-going research and development ("R&D") projects by the Arizona Research Institute for Solar Energy ("AZRise"). The 2010 REST plan included \$20,000 for funding AZRise research. Staff recommends continuing to fund UNS R&D activities at the existing \$20,000 level for the 2011 REST budget.

### **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. UNS' filing in this proceeding contemplates continuation of the 60 percent level. Staff believes that this should be reconsidered. To the extent the maximum percentage can be reduced without significantly impacting the marketplace, such a reduction would result in the most subsidized projects receiving a moderately lower subsidy. This would result in a net increase in the number of projects completed for the same level of total spending. In discussions with UNS, the Company indicated that few projects in recent years are close to the 60 percent of system cost level. Staff believes that a reduction of this level to 50 percent would represent a 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 50 percent for both residential and commercial projects.

### **2009 Under-recovery of REST Funds**

UNS' budget includes a proposal to recover a \$363,356 under-recovery it experienced in 2009. UNS has indicated to Staff that it spent roughly the amount budgeted for 2009, 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 2011 REST budget, but is also concerned that recovery of these funds by increasing the budget in 2011 will exacerbate already high customer class cap and per customer costs for UNS. 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 2011 or another future year.

**DG Incentive Levels**

UNS is proposing to maintain the residential UFI DG incentive at \$1.75 per watt to begin 2011, with a conditional trigger that could reduce the incentive to \$1.50 per watt in 2011 if certain conditions are met. UNS is similarly proposing to maintain the commercial UFI DG incentive at \$1.50 per watt, with a conditional trigger that could reduce the incentive to \$1.25 per watt in 2011 if certain conditions are met. The incentives for UNS were reduced to their present levels by the Commission in Decision No. 71853 (August 25, 2010).

The triggers for possibly reducing the incentive levels would operate on the basis of whether UNS spends 60 percent of its proposed incentive budget for either the residential or commercial UFI DG segments on or before June 30, 2010. If this trigger point is reached by UNS for either customer class prior to June 30, 2010, UNS would then send out a notice that the incentive level would be reduced as of the close of business on the Friday that is closest to 30 days after the trigger is reached. Staff believes that this is a reasonable trigger mechanism that would provide the opportunity to reduce the incentive level if market conditions show UNS is well ahead in spending its 2011 incentive budgets. Staff further believes that this particular trigger mechanism should avoid the "notch" problem that has occurred in recent cases where utilities have filed with the Commission for an incentive reduction, and customers between the time of the filing and Commission action have expected to receive the older, higher incentive level, rather than the new, lower incentive level approved by the Commission. Staff recommends approval of the DG incentive levels and trigger mechanism proposed by UNS with one minor modification. Staff further recommends that the incentive level be reduced on the close of business on the first Friday following 30 days after the trigger is reached.

**Proposed 2011 REST Budgets**

UNS' supplemental filing contains a budget request to spend approximately \$10.1 million for its 2011 REST plan. By comparison, UNS' approved 2010 REST plan contained spending of \$8.7 million. Staff has reviewed UNS' proposed budget for the 2011 REST plan and has reduced certain costs to achieve a Staff proposed budget level of \$9.3 million.

The table below shows proposed spending levels by area for UNS' proposed 2011 REST budget and Staff's proposed 2011 REST budget.

Budget Components	2011 REST Plan UNS Proposed Budget	2011 REST Plan Staff Proposed Budget
<i>Purchased Renewable Energy</i>		
Above market cost of conventional generation	\$1,440,000	\$1,440,000
Other	\$20,000	\$20,000
Subtotal	<i>\$1,460,000</i>	<i>\$1,460,000</i>
<i>Customer Sited Distributed Renewable Energy</i>		
Up-front payments to customers - residential	\$4,002,552	\$4,002,552

THE COMMISSION

November 8, 2010

Page 8

Up-front payments to customers - commercial	\$1,051,646	\$1,051,646
Production-based payments to customers	\$1,645,686	\$1,645,686
Lost net revenue and performance incentive	\$73,752	\$0
Outreach efforts	\$150,000	\$150,000
Other	\$541,750	\$503,750
Subtotal	\$7,465,386	\$7,353,634
<i>Information Systems</i>		
Subtotal	\$120,000	\$75,000
<i>School Vocational Program</i>		
Subtotal	\$154,000	\$0
<i>Net Metering</i>		
Subtotal	\$333,938	\$308,938
<i>Reporting</i>		
Subtotal	\$130,000	\$110,000
<i>Outside Coordination and Support, Research and Development</i>		
Support to university research	\$20,000	\$20,000
Other	\$33,750	\$2,000
Subtotal	\$53,750	\$22,000
<i>Undercollection of REST Funds From 2009</i>		
Subtotal	\$363,356	\$0
Total Budget	\$10,080,430	\$9,329,572

It should be noted that \$800,000 of projected unspent commercial PBI funds were reallocated to provide \$400,000 in additional funds for further 2010 residential UFI incentives and \$400,000 in additional funds for further commercial UFI incentives, above and beyond the approved 2010 REST plan budget, as ordered by the Commission in Decision No. 71853 (August 25, 2010). UNS anticipates the extra UFI funds will be fully spent by the end of 2010.

**Recovery of Funds Through 2011 REST Charge**

UNS' proposed caps and per kWh charge are designed to recover UNS' proposed budget of \$10.1 million, while Staff's proposed caps and per kWh charge are designed to recover Staff's proposed budget of \$9.3 million. It is worth noting that UNS' 2010 REST budget was supplemented with \$900,000 of unspent 2009 REST funds. No such supplement from previous years' REST funds is available for the 2011 REST budget.

UNS' residential cap was \$9.00 per month in 2010 and UNS' proposed cap in 2011 is \$12.00. This is significantly higher than other utilities, including UNS' sister utility, TEP. Staff has reviewed circumstances around UNS' high residential cap. UNS' commercial class caps are also relatively high. Staff believes that a major factor in UNS' high residential rate is that UNS has a high percentage of total consumption coming from the industrial/mining sector, approximately 25 percent. Thus, one quarter of UNS' REST requirement it must meet is as a result of industrial/mining load. Yet, due to low cap on the maximum payment from

THE COMMISSION

November 8, 2010

Page 9

industrial/mining customers, this class pays less than four percent of total REST charge payments according to information related to UNS' 2010 REST plan. Thus the industrial/mining sector drives UNS' REST requirement significantly higher, but the residential and commercial classes pay higher REST charges to fund most of that higher REST incremental requirement.

	2010 Approved REST Charge (per kWh)	UNS Proposed 2011 REST Charge (per kWh)	Staff Proposed 2011 REST Charge (per kWh)	2010 Approved Cap	UNS Proposed 2011 Cap	Staff Proposed 2011 Cap
Residential	\$0.007134	\$0.008561	\$0.008315	\$9.00	\$12.00	\$9.00
Small Commercial	\$0.007134	\$0.008561	\$0.008315	\$140.00	\$189.00	\$160.00
Industrial and Mining	\$0.007134	\$0.008561	\$0.008315	\$2,700.00	\$3,652.00	\$5,000.00
Lighting	\$0.007134	\$0.008561	\$0.008315	\$140.00	\$189.00	\$140.00

The cost recovery by customer class for the approved 2010 REST plan and the UNS and Staff proposed 2011 REST plans is shown in the table below.

	2010 REST Plan – Approved	2011 REST Plan – UNS Proposed	2011 REST Plan – Staff Proposed
Residential	\$4,781,326 (61.0%)	\$6,152,689 (61.2%)	\$5,449,937 (58.4%)
Commercial	\$2,449,876 (31.3%)	\$3,082,836 (30.6%)	\$2,852,128 (30.6%)
Industrial and Mining	\$596,908 (7.6%)	\$816,530 (8.1%)	\$1,021,279 (10.9%)
Lighting	\$5,770 (0.1%)	\$6,832 (0.1%)	\$6,115 (0.1%)
Total	\$7,833,880	\$10,058,886	\$9,329,459

For comparison purposes, the table below shows the projected kWh sales by customer class for 2011. Note that the residential class consumes 42.9 percent of kWh for UNS, but is projected to pay 61.2 percent of REST charges under UNS' proposal. In contrast, the industrial and mining class consumes 24.3 percent of kWh for UNS, but is projected to pay 8.1 percent of REST charges under UNS' proposal.

	2011 Projected Sales (MWh)
Residential	819,742 (42.9%)
Commercial	624,861 (32.7%)
Industrial and Mining	465,151 (24.3%)
Lighting	852 (0.0%)
Total	1,910,606

THE COMMISSION

November 8, 2010

Page 10

The table below shows the contribution, per kWh consumed, for each customer class (projected class cost recovery divided by projected class kWh sales) to pay for the 2011 REST budget. 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.

	2010 REST Plan – Approved (per kWh)	2011 REST Plan – TEP Proposed (per kWh)	2011 REST Plan – Staff Proposed (per kWh)
Residential	\$0.00587	\$0.00756	\$0.00665
Commercial	\$0.00391	\$0.00496	\$0.00456
Industrial and Mining	\$0.00139	\$0.00167	\$0.00220
Lighting	\$0.00615	\$0.00810	\$0.00718

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

	2010 REST Plan – Approved	2011 REST Plan – UNS Proposed	2011 REST Plan – Staff Proposed
Residential - Average Bill	\$6.07	\$7.28	\$7.07
Commercial - Average Bill	\$28.07	\$24.63	\$22.78
Industrial and Mining - Average Bill	\$3,433.00	\$2,895.00	\$3,622.00
Lighting - Average Bill	\$13.58	\$2.70	\$2.41
Residential – Percent at Cap	72.8%	20.5%	20.6%
Commercial – Percent at Cap	6.6%	4.8%	4.8%
Industrial and Mining – Percent at Cap	91.2%	63.5%	48.0%
Lighting – Percent at Cap	0.1%	0.4%	0.0%

Estimated customer bill impacts for various conservation levels are shown in the table below.

<u>Customer Types</u>	<u>kWh / mo.</u>	<u>UNS Proposed Plans</u>		
		<u>2010 Approved Plan</u>	<u>2011 UNS Proposed Plan</u>	<u>2011 Staff Proposed Plan</u>
Low Consuming Residence	400	\$2.85	\$3.42	\$3.33
Avg. Consuming Residence	850	\$6.07	\$7.28	\$7.07
High Use Residence	2,000	\$9.00	\$12.00	\$9.00
Dentist Office	2,000	\$14.27	\$17.12	\$16.63
Hairstylist	3,900	\$27.82	\$33.39	\$32.43
Department Store	170,000	\$140.00	\$189.00	\$160.00
Mall	1,627,100	\$140.00	\$189.00	\$160.00
Retail Video Store	14,400	\$102.73	\$123.28	\$119.74
Large Hotel	1,067,100	\$140.00	\$189.00	\$160.00
Large Building Supply	346,500	\$140.00	\$189.00	\$160.00
Hotel/Motel	27,960	\$140.00	\$189.00	\$160.00
Fast Food	60,160	\$140.00	\$189.00	\$160.00
Large High Rise Office Bldg	1,476,100	\$140.00	\$189.00	\$160.00
Hospital (< 3 MW)	1,509,600	\$2,700.00	\$3,652.00	\$5,000.00
Supermarket	233,600	\$140.00	\$189.00	\$160.00
Convenience Store	20,160	\$140.00	\$172.59	\$160.00
Hospital (> 3 MW)	2,700,000	\$2,700.00	\$3,652.00	\$5,500.00
Copper Mine	72,000,000	\$2,700.00	\$3,652.00	\$5,500.00

Staff recommends approval of the proposed Staff 2011 REST plan. Staff believes that its recommendation provides adequate funding to achieve UNS' 2011 REST goals, and moves toward more equitable allocation of costs between customer classes. Staff additionally believes that the lower per kWh charge contained in the Staff plan encourages energy conservation, by charging less to low use customers than would be the case under the current charge or UNS' proposed charge.

### **REST Adjustor Mechanism**

The Commission established a REST adjustor mechanism for UNS in Decision No. 70360 (May 28, 2008). The REST adjustor rate is reset as part of the approval of each year's new REST implementation plan.

### **Staff Recommendations**

1. Staff recommends that the Commission approve the Staff proposed 2011 REST plan, reflecting a REST charge of \$0.008315 per kWh, and related caps reflected in the Staff proposal. This includes a total budget of \$9,329,572.
2. Staff recommends approval of the trigger mechanism for reducing DG incentives proposed by UNS as modified.

THE COMMISSION

November 8, 2010

Page 12

3. Staff recommends that UNS post information on its own website, and if possible on the Arizonagoessolar.org website at least every two weeks, regarding its progress toward reaching the trigger.
4. Staff recommends that, if UNS hits the trigger, UNS provide notice as soon as practicable, on its website, on Arizonagoessolar.org and through other available communication avenues, to information installers, customers, and others when the trigger is hit, when the incentive will be lowered, what the new incentive will be, and other pertinent information.
5. Staff recommends reducing the maximum percentage of a project that can be paid for with utility incentives to 50 percent.
6. Staff recommends approval of UNS' proposed research and development projects and funding.
7. Staff recommends that the Commission not approve UNS' request for lost net revenue resulting from DG deployments and related costs.
8. Staff recommends against approval of the School Vocational Program, as discussed herein.
9. Staff recommends that as part of UNS' 2012 REST plan filing, the Company review the success of the TEP School Vocational Program and make a proposal in its 2012 REST plan on whether to propose such a program in UNS' service territory for 2012.
10. UNS should file its Renewable Energy Standard and Tariff Surcharge tariff consistent with the Decision in this case within 15 days of the effective date of the Decision.
11. Staff recommends approval of the Bright Arizona program, subject to the following conditions:
  - A. All adjustors, except the PPFAC and REST, shall apply to the solar block energy purchased under the Bright Arizona program.
  - B. The solar capacity rates of the Bright Arizona program be fixed for 20 years to reflect the typical length of a PPA.
  - C. Any excess solar block energy shall be purchased back from the customer at the time the customer terminates participation in the program.

- D. The program shall contain an annual "true-up" accounting provision in October (September usage) to eliminate the possibility of customers accruing an excessive credit.
- E. The determination of the reasonableness and prudence of program costs be reviewed as part of UNS Electric's next rate case.
- F. UNS indicate on the tariff that subscription to the Bright Arizona program is based upon solar generation resources available.
- G. UNS include in its annual REST reports information on the amount (MW) of solar resources available for the Bright Arizona program and the amount (MW) of solar resources subscribed by customers participating in the program.
- H. The three proposed solar tariffs should be eliminated in favor of a single "solar" rider attached to the three existing base tariffs listed in the table above (that shall include the Delivery Service and Base Power shown in the table above), using the \$0.02 per kWh solar premium as the rider.
- I. UNS should file the Bright Arizona tariffs consistent with the Decision in this case within 30 days of the effective date of the Decision.
- J. UNS should file its Renewable Energy Standard and Tariff Surcharge tariff consistent with the Decision in this case within 15 days of the effective date of the Decision.



Steven M. Olea  
Director  
Utilities Division

SMO:RGG:lhm\CH

ORIGINATOR: Robert Gray

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

BEFORE THE ARIZONA CORPORATION COMMISSION

KRISTIN K. MAYES  
Chairman  
GARY PIERCE  
Commissioner  
PAUL NEWMAN  
Commissioner  
SANDRA D. KENNEDY  
Commissioner  
BOB STUMP  
Commissioner

IN THE MATTER OF THE APPLICATION )  
OF UNS ELECTRIC, INC. FOR APPROVAL )  
OF ITS 2011 RENEWABLE ENERGY )  
STANDARD AND TARIFF )  
IMPLEMENTATION PLAN )

DOCKET NO. E-04204A-10-0265  
DECISION NO. \_\_\_\_\_  
ORDER

Open Meeting  
November 22 and 23, 2010  
Phoenix, Arizona

BY THE COMMISSION:

FINDINGS OF FACT

1. UNS Electric, Inc. ("UNS" or "Company") is engaged in providing electric service within portions of Arizona, pursuant to authority granted by the Arizona Corporation Commission.
2. On July 1, 2010, UNS filed for Commission approval of its 2011 Renewable Energy Standard and Tariff ("REST") Implementation Plan. On October 13, 2010, UNS filed an update to its proposed REST Implementation Plan. There have been no filings for intervention or comments filed in the docket to date.
3. UNS' initial filing requests approval of various REST plan components, including a budget, incentive levels, recovery of lost net revenue, customer class caps, various program details, a Bright Arizona Community Solar Program, a Bright Arizona Solar Buildout Plan, a School Vocational Program, a Feed-in Tariff Pilot Program, an incentive tied to UNS' Energy Efficiency Audit Program, and approval of research and development funding for 2011.

...

1 4. The initial filing also cites the Zero-Net Energy Homes Pilot Program, but UNS is  
 2 not requesting any action regarding this program in this proceeding.

3 5. UNS' plan update, filed on October 13, 2010, proposes changes to the incentive  
 4 levels, budget levels, customer class caps, and other related issues. The plan withdraws UNS'  
 5 request for a REST incentive tied to its Energy Efficiency Audit program.

6 **Recovery of Lost Net Fixed Revenue for DG Projects**

7 6. UNS' proposed budget includes \$73,752 for recovery of lost net revenue related to  
 8 DG implemented through the REST plan. The Commission has not granted lost net revenues as a  
 9 result of DG deployments to any utility in Arizona and specifically rejected UNS' request for DG  
 10 lost net revenue in relation to UNS' 2010 REST plan. UNS' application does not make any case  
 11 for inclusion of lost net revenue, other than inclusion of the line item in the budget. Staff  
 12 recommends that the Commission not approve UNS' request for recovery of possible lost net  
 13 revenue resulting from DG deployments.

14 **UNS REST Experience Under 2010 REST Plan**

15 7. The Commission-approved implementation plan for 2010 contemplated a budget of  
 16 \$8.7 million. Approximately \$0.9 million in leftover 2008 REST funds were used to help fund the  
 17 2010 REST budget. UNS projects that it will spend its entire REST budget in 2010.

18 8. Regarding installations and reservations, the table below summarizes installations  
 19 through September 2010 and reservations for future installations.

Residential	Photovoltaics		Solar Hot Water	
	Number of Systems	kW	Number of Systems	kWh
2010 Installations	246	1,557	85	233,750
Reservations	230	1,687	20	55,000

Commercial	Photovoltaics		Solar Hot Water	
	Number of Systems	kW	Number of Systems	kWh
2010 Installations	26	313	0	0
Reservations	33	1,245	0	0

26  
 27 ...  
 28 ...

Wind	Residential		Commercial	
	Number of Systems	kW	Number of Systems	kWh
2010 Installations	34	73	0	0
Reservations	11	18	0	0

9. 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 also the systems that are reserved, but have not yet been installed.

	Required (MWH)	Produced/Banked (MWH)
Residential DG	4,620	4,398 (installed – annualized) 5,420 (installed – annualized/reserved)
Commercial DG	4,620	561 (installed – annualized) 5,578 (installed – annualized/reserved)
Non-DG	36,963	5,545

### School Vocational Program

10. UNS is proposing a new School Vocational Program ("SVP") that would involve the deployment of three PV systems at high schools within UNS' service territory. UNS would work with school officials to determine good candidates for participation in the program, based on the appropriateness of the site for a PV deployment as well as the school's ability to create an on-going vocational training program in collaboration with UNS. The program budget is \$154,000, including \$75,000 for equipment and \$79,000 in training and seminar funds.

11. UNS' sister company, Tucson Electric Power Company ("TEP") has proposed a similar School Vocational Program for its service territory around Tucson. Staff notes that the recently concluded UNS general rate proceeding included an ordering paragraph in the final decision (Decision No. 71914, September 30, 2010) that orders UNS shall: "develop a school-specific renewable program for inclusion in the Company's renewable energy implementation plan . . . ."

1           12. Staff believes that the best course of action regarding UNS' proposed School  
2 Vocational Program is to let TEP test the program in its service territory in 2010, and have UNS  
3 recommend whether or not it believes the program should be implemented in its service territory in  
4 2012 as part of its 2012 REST implementation plan. Staff makes this recommendation as part of  
5 its effort to reduce the UNS REST budget where possible to try to reduce the customer class caps  
6 for UNS as well as the average cost per customer. Staff's proposal reduces the cost for UNS in  
7 2011, while providing the opportunity for the program to be implemented the next year if it is  
8 successful for TEP in 2011.

9           13. Specifically, Staff recommends that as part of UNS' 2012 REST plan filing, the  
10 Company review the success of the TEP School Vocational Program and make a proposal in its  
11 2012 REST plan on whether to propose such a program in UNS' service territory for 2012.

12 **Bright Arizona Community Solar Program**

13           14. UNS is proposing the implementation of a new Bright Arizona Community Solar  
14 Program ("Bright Arizona program") in 2011. The Bright Arizona program is patterned after  
15 TEP's existing Bright Tucson Community Solar Program ("Bright Tucson program") in some  
16 ways. TEP's Bright Tucson Program was approved by the Commission in Decision No. 71835  
17 (August 10, 2010). As with TEP's program, UNS' customers can buy 1 kW blocks which equal  
18 150 kWh of electricity per month. UNS' application indicates in some places that customers  
19 would pay a \$0.01 per kWh premium, while in other places the application indicates that there  
20 would be a \$0.02 per kWh premium. The Company has indicated to Staff that the \$0.01 per kWh  
21 references are in error, and that customers would pay a \$0.02 per kWh premium over the otherwise  
22 applicable tariffed rate under UNS' proposal, which is consistent with the premium paid under  
23 TEP's program.

24           15. Under the Company's proposal, the price under the tariff would be fixed for the  
25 customer for ten years, and Bright Arizona customers would not be subject to fluctuating  
26 purchased power adjustor costs that regular tariff customers are exposed to. If purchased kWh  
27 under the Bright Arizona program are not used during a month, excess kWh are rolled over into  
28 the next month. The non-variable portion of the bill would change if it is changed on the

1 otherwise applicable tariff as a result of a general rate proceeding. In concert with the Bright  
2 Arizona program, UNS is proposing a Bright Arizona Solar Buildout Plan, as discussed below.

3 16. UNS is proposing three new tariffs for taking service under the Bright Arizona  
4 program, for residential, small general service and large general service. These new tariffs match  
5 the existing customer classes for providing general service to residential and commercial  
6 customers. The table below reflects the basic rate components for the three rate classes.

	Delivery Charge (per kWh)	Base Power (per kWh)	Total Absent Solar Capacity Charge (per kWh)	Total With \$0.02 per kWh Solar Capacity Charge
7 Residential 8 (RES-1)	1 <sup>st</sup> 400 kWh - \$0.014507 Above 400 kWh - \$0.27414	\$0.074812	1 <sup>st</sup> 400 kWh - \$0.089319 Above 400 kWh - \$0.102226	1 <sup>st</sup> 400 kWh - \$0.109319 Above 400 kWh - \$0.122226
9 Small General 10 Service (SGS- 11 10)	1 <sup>st</sup> 400 kWh - \$0.026756 Above 400 kWh - \$0.038691	\$0.072649	1 <sup>st</sup> 400 kWh - \$0.099405 Above 400 kWh - \$0.111340	1 <sup>st</sup> 400 kWh - \$0.119405 Above 400 kWh - \$0.131340
12 Large General 13 Service (LGS)	\$0.003871	\$0.064326	\$0.068197	\$0.088197

14 17. TEP had recommended separate new tariffs in its application for approval of the  
15 Bright Tucson program, a recommendation the Commission rejected. TEP was required to  
16 provide a single new rider that would add \$0.02 per kWh to service under an existing tariff. Staff  
17 believes UNS' proposal for separate new tariffs should be similarly rejected in favor of one rider  
18 tariff that adds the \$0.02 per kWh premium to service on a regular existing tariff.

19 18. UNS anticipates installation of photovoltaic facilities starting in late 2011 to  
20 provide renewable energy for sale under this tariff. UNS has not determined whether renewable  
21 energy under this program will be provided through Company-owned facilities, purchased power  
22 agreements, or some combination. UNS will market this tariff in conjunction with the permitting  
23 and construction schedule for the production facilities to supply Bright Arizona program customers  
24 with renewable energy. Projects constructed to serve Bright Arizona customers would count  
25 toward UNS' non-DE renewable energy requirement, not its residential or commercial DE  
26 requirements.

27 19. Staff believes that UNS' proposed Bright Arizona program is consistent with the  
28 Bright Tucson program the Commission previously approved. Consistent with the Commission's

1 decision on the Bright Tucson program, Staff makes the following recommendations regarding the  
2 Bright Arizona program:

- 3           A. All adjustors, except the Purchased Power Fuel Adjustor Clause ("PPFAC")  
4           and REST, should apply to the solar block energy purchased under the Bright  
5           Arizona program.
- 6           B. The solar capacity rates of the Bright Arizona program should be fixed for 20  
7           years to reflect the typical length of a Purchased Power Agreement ("PPA").
- 8           C. Any excess solar block energy should be purchased back from the customer at  
9           the time the customer terminated participation in the program.
- 10           D. The program should contain an annual "true-up" accounting provision in  
11           October (September usage) to eliminate the possibility of customers accruing  
12           an excessive credit.
- 13           E. The determination of the reasonableness and prudence of program costs  
14           should be reviewed as part of UNS Electric's next rate case.
- 15           F. UNS should indicate on the tariff that subscription to the Bright Arizona  
16           program is based upon solar generation resources available.
- 17           G. UNS should include in its annual REST reports information on the amount  
18           (MW) of solar resources available for the Bright Arizona program and the  
19           amount (MW) of solar resources subscribed by customers participating in the  
20           program.
- 21           H. The three proposed solar tariffs should be eliminated in favor of a single  
22           "solar" rider attached to the three existing base tariffs listed in the table above  
23           (that shall include the Delivery Service and Base Power shown in the table  
24           above), using the \$0.02 per kWh solar premium as the rider.

25 **Bright Arizona Solar Buildout Plan**

26           20. UNS is requesting approval of a four-year build-out plan for the Bright Arizona  
27           Solar program. The Bright Arizona program is being proposed in this proceeding by UNS, as  
28           described above.

          21. The buildout plan would involve \$20,000,000 for 5 MW of utility-scale, utility-  
owned solar installations, with 1.25 MW installed each year from 2011 through 2014, and  
recovery of carrying costs through the REST charge from 2012 through 2015. Thus UNS is not  
seeking recovery of any of these costs in the 2011 REST plan, but such recovery would be  
anticipated to begin with the 2012 REST plan.

1           22.    No costs related to the buildout plan are being proposed by UNS for recovery in  
2 2011. UNS estimates that the carrying costs to be recovered for the buildout plan beginning in  
3 2012 would be \$665,169 in 2012, \$323,341 in 2013, \$665,169 in 2014, and \$1,293,362 in 2015.

4           23.    Staff believes that UNS' proposal for the Bright Arizona Solar Buildout Plan is  
5 similar to the proposal by Arizona Public Service Company ("APS") for its AZ Sun Program,  
6 which was approved by the Commission in Decision No. 71502 (March 17, 2010). UNS' proposal  
7 for the build out plan would involve a commitment for the next four years. Staff believes that it is  
8 reasonable to approve UNS' proposal for the first year of the buildout plan, but that UNS should  
9 seek Commission approval as part of its 2012 REST plan for further years of the buildout plan.  
10 This will provide UNS with the opportunity to gauge success of the first year of the buildout plan  
11 and make necessary adjustments. Staff recommends that UNS, as part of its 2012 REST plan  
12 filing, report on the status of its buildout plan.

13           24.    Treatment of the costs for these facilities would mirror the Commission's treatment  
14 of APS facilities in Decision No. 71502, namely, Staff recommends that recovery of carrying costs  
15 until UNS' next rate case is appropriate and reasonable. Staff further recommends that  
16 reasonableness and prudence of buildout plan costs be examined in UNS' next rate case and that  
17 any costs determined not to be reasonable and prudent be refunded by the Company.

#### 18 **Research and Development**

19           25.    UNS is requesting approval of funding of \$50,000 to fund on-going research and  
20 development ("R&D") projects by the Arizona Research Institute for Solar Energy ("AZRise").  
21 The 2010 REST plan included \$20,000 for funding AZRise research. Staff recommends  
22 continuing to fund UNS R&D activities at the existing \$20,000 level for the 2011 REST budget.

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

24           26.    In recent years, UNS' REST plans have included a provision that the maximum  
25 percentage of system cost for a customer that could be paid through utility rebates would be 60  
26 percent. UNS' filing in this proceeding contemplates continuation of the 60 percent level. Staff  
27 believes that this should be reconsidered. To the extent the maximum percentage can be reduced  
28 without significantly impacting the marketplace, such a reduction would result in the most

1 subsidized projects receiving a moderately lower subsidy. This would result in a net increase in  
2 the number of projects completed for the same level of total spending. In discussions with UNS,  
3 the Company indicated that few projects in recent years are close to the 60 percent of system cost  
4 level. Staff believes that a reduction of this level to 50 percent would represent a modest change,  
5 but would be a step toward more efficiently spending REST funds. Staff recommends reducing  
6 the maximum percentage of system cost that could be paid through utility rebates to 50 percent for  
7 both residential and commercial projects.

#### 8 **2009 Under-recovery of REST Funds**

9 27. UNS' budget includes a proposal to recover a \$363,356 under-recovery it  
10 experienced in 2009. UNS has indicated to Staff that it spent roughly the amount budgeted for  
11 2009, but that recoveries through the REST surcharge were lower than projected, resulting in the  
12 under-recovery. Staff is cognizant of UNS' desire to recover this additional amount of money  
13 through its 2011 REST budget, but is also concerned that recovery of these funds by increasing the  
14 budget in 2011 will exacerbate already high customer class cap and per customer costs for UNS.  
15 Therefore Staff has removed this line item from UNS' budget under the Staff proposal,  
16 recognizing that UNS can recover these funds through spending less than the budgeted amount in  
17 2011 or another future year.

#### 18 **DG Incentive Levels**

19 28. UNS is proposing to maintain the residential UFI DG incentive at \$1.75 per watt to  
20 begin 2011, with a conditional trigger that could reduce the incentive to \$1.50 per watt in 2011 if  
21 certain conditions are met. UNS is similarly proposing to maintain the commercial UFI DG  
22 incentive at \$1.50 per watt, with a conditional trigger that could reduce the incentive to \$1.25 per  
23 watt in 2011 if certain conditions are met. The incentives for UNS were reduced to their present  
24 levels by the Commission in Decision No. 71853 (August 25, 2010).

25 29. The triggers for possibly reducing the incentive levels would operate on the basis of  
26 whether UNS spends 60 percent of its proposed incentive budget for either the residential or  
27 commercial UFI DG segments on or before June 30, 2010. If this trigger point is reached by UNS  
28 for either customer class prior to June 30, 2010, UNS would then send out a notice that the

1 incentive level would be reduced as of the close of business on the Friday that is closest to 30 days  
 2 after the trigger is reached. Staff believes that this is a reasonable trigger mechanism that would  
 3 provide the opportunity to reduce the incentive level if market conditions show UNS is well ahead  
 4 in spending its 2011 incentive budgets. Staff further believes that this particular trigger  
 5 mechanism should avoid the "notch" problem that has occurred in recent cases where utilities have  
 6 filed with the Commission for an incentive reduction, and customers between the time of the filing  
 7 and Commission action have expected to receive the older, higher incentive level, rather than the  
 8 new, lower incentive level approved by the Commission. Staff recommends approval of the DG  
 9 incentive levels and trigger mechanism proposed by UNS with one minor modification. Staff  
 10 further recommends that the incentive level be reduced on the close of business on the first Friday  
 11 following 30 days after the trigger is reached.

#### 12 **Proposed 2011 REST Budgets**

13 30. UNS' supplemental filing contains a budget request to spend approximately \$10.1  
 14 million for its 2011 REST plan. By comparison, UNS' approved 2010 REST plan contained  
 15 spending of \$8.7 million. Staff has reviewed UNS' proposed budget for the 2011 REST plan and  
 16 has reduced certain costs to achieve a Staff proposed budget level of \$9.3 million.

17 31. The table below shows proposed spending levels by area for UNS' proposed 2011  
 18 REST budget and Staff's proposed 2011 REST budget.

Budget Components	2011 REST Plan UNS Proposed Budget	2011 REST Plan Staff Proposed Budget
<i>Purchased Renewable Energy</i>		
Above market cost of conventional generation	\$1,440,000	\$1,440,000
Other	\$20,000	\$20,000
Subtotal	<i>\$1,460,000</i>	<i>\$1,460,000</i>
<i>Customer Sited Distributed Renewable Energy</i>		
Up-front payments to customers - residential	\$4,002,552	\$4,002,552
Up-front payments to customers - commercial	\$1,051,646	\$1,051,646
Production based payments to customers	\$1,645,686	\$1,645,686
Lost net revenue and performance incentive	\$73,752	\$0
Outreach efforts	\$150,000	\$150,000

1	Other	\$541,750	\$503,750
	Subtotal	\$7,465,386	\$7,353,634
2	<i>Information Systems</i>		
	Subtotal	\$120,000	\$75,000
3	<i>School Vocational Program</i>		
	Subtotal	\$154,000	\$0
4	<i>Net Metering</i>		
	Subtotal	\$333,938	\$308,938
5	<i>Reporting</i>		
	Subtotal	\$130,000	\$110,000
6	<i>Outside Coordination and Support, Research and Development</i>		
7	Support to university research	\$20,000	\$20,000
	Other	\$33,750	\$2,000
8	Subtotal	\$53,750	\$22,000
9	<i>Undercollection of REST Funds From 2009</i>		
	Subtotal	\$363,356	\$0
10	Total Budget	\$10,080,430	\$9,329,572

11           32.     It should be noted that \$800,000 of projected unspent commercial PBI funds were  
12 reallocated to provide \$400,000 in additional funds for further 2010 residential UFI incentives and  
13 \$400,000 in additional funds for further commercial UFI incentives, above and beyond the  
14 approved 2010 REST plan budget, as ordered by the Commission in Decision No. 71853 (August  
15 25, 2010). UNS anticipates the extra UFI funds will be fully spent by the end of 2010.

#### 16 **Recovery of Funds Through 2011 REST Charge**

17           33.     UNS' proposed caps and per kWh charge is designed to recover UNS' proposed  
18 budget of \$10.1 million, while Staff's proposed caps and per kWh charge are designed to recover  
19 Staff's proposed budget of \$9.3 million. It is worth noting that UNS' 2010 REST budget was  
20 supplemented with \$900,000 of unspent 2009 REST funds. No such supplement from previous  
21 years' REST funds is available for the 2011 REST budget.

22           34.     UNS' residential cap was \$9.00 per month in 2010 and UNS' proposed cap in 2011  
23 is \$12.00. This is significantly higher than other utilities, including UNS' sister utility, TEP. Staff  
24 has reviewed circumstances around UNS' high residential cap. UNS' commercial class caps are  
25 also relatively high. Staff believes that a major factor in UNS' high residential rate is that UNS  
26 has a high percentage of total consumption coming from the industrial/mining sector,  
27 approximately 25 percent. Thus, one quarter of UNS' REST requirements it must meet are as a  
28 result of industrial/mining load. Yet, due to low cap on the maximum payment from

1 industrial/mining customers, this class pays less than four percent of total REST charge payments  
 2 according to information related to UNS' 2010 REST plan. Thus the industrial/mining sector  
 3 drives UNS' REST requirement significantly higher, but the residential and commercial classes  
 4 pay higher REST charges to fund most of that higher REST incremental requirement.

	2010 Approved REST Charge (per kWh)	UNS Proposed 2011 REST Charge (per kWh)	Staff Proposed 2011 REST Charge (per kWh)	2010 Approved Cap	UNS Proposed 2011 Cap	Staff Proposed 2011 Cap
Residential	\$0.007134	\$0.008561	\$0.008315	\$9.00	\$12.00	\$9.00
Small Commercial	\$0.007134	\$0.008561	\$0.008315	\$140.00	\$189.00	\$160.00
Industrial and Mining	\$0.007134	\$0.008561	\$0.008315	\$2,700.00	\$3,652.00	\$5,000.00
Lighting	\$0.007134	\$0.008561	\$0.008315	\$140.00	\$189.00	\$140.00

11  
 12 35. The cost recovery by customer class for the approved 2010 REST plan and the UNS  
 13 and Staff proposed 2011 REST plans is shown in the table below.

	2010 REST Plan – Approved	2011 REST Plan – UNS Proposed	2011 REST Plan – Staff Proposed
Residential	\$4,781,326 (61.0%)	\$6,152,689 (61.2%)	\$5,449,937 (58.4%)
Commercial	\$2,449,876 (31.3%)	\$3,082,836 (30.6%)	\$2,852,128 (30.6%)
Industrial and Mining	\$596,908 (7.6%)	\$816,530 (8.1%)	\$1,021,279 (10.9%)
Lighting	\$5,770 (0.1%)	\$6,832 (0.1%)	\$6,115 (0.1%)
Total	\$7,833,880	\$10,058,886	\$9,329,459

18 36. For comparison purposes, the table below shows the projected kWh sales by  
 19 customer class for 2011. Note that the residential class consumes 42.9 percent of kWh for UNS,  
 20 but is projected to pay 61.2 percent of REST charges under UNS' proposal. In contrast, the  
 21 industrial and mining class consumes 24.3 percent of kWh for UNS, but is projected to pay 8.1  
 22 percent of REST charges under UNS' proposal.

	2011 Projected Sales (MWH)
Residential	819,742 (42.9%)
Commercial	624,861 (32.7%)
Industrial and Mining	465,151 (24.3%)
Lighting	852 (0.0%)
Total	1,910,606

1           37.     The table below shows the contribution, per kWh consumed, for each customer  
2 class (projected class cost recovery divided by projected class kWh sales) to pay for the 2011  
3 REST budget. Staff's proposal for class caps and the per kWh charge is intended to gradually  
4 move the customer classes closer to one another in terms of their contribution per kWh consumed  
5 in each customer class.

	2010 REST Plan – Approved (per kWh)	2011 REST Plan – UNS Proposed (per kWh)	2011 REST Plan – Staff Proposed (per kWh)
6 Residential	\$0.00587	\$0.00756	\$0.00665
7 Commercial	\$0.00391	\$0.00496	\$0.00456
8 Industrial and Mining	\$0.00139	\$0.00167	\$0.00220
9 Lighting	\$0.00615	\$0.00810	\$0.00718

10           38.     The table below shows the average bill by customer class as well as the percentage  
11 of customers at the cap for each customer class.

	2010 REST Plan – Approved	2011 REST Plan – UNS Proposed	2011 REST Plan – Staff Proposed
12 Residential - Average Bill	\$6.07	\$7.28	\$7.07
13 Commercial - Average 14 Bill	\$28.07	\$24.63	\$22.78
15 Industrial and Mining - 16 Average Bill	\$3,433.00	\$2,895.00	\$3,622.00
17 Lighting - Average Bill	\$13.58	\$2.70	\$2.41
18 Residential – Percent at 19 Cap	72.8%	20.5%	20.6%
20 Commercial – Percent at 21 Cap	6.6%	4.8%	4.8%
22 Industrial and Mining – 23 Percent at Cap	91.2%	63.5%	48.0%
24 Lighting – Percent at Cap	0.1%	0.4%	0.0%

25           39.     Estimated customer bill impacts for various consumption levels are shown in the  
26 table below.

27 ...

28 ...

...

...

...

...

...

Customer Types	kWh / mo.	UNS Proposed Plans		
		2010 Approved Plan	2011 UNS Proposed Plan	2011 Staff Proposed Plan
Low Consuming Residence	400	\$2.85	\$3.42	\$3.33
Avg. Consuming Residence	850	\$6.07	\$7.28	\$7.07
High Use Residence	2,000	\$9.00	\$12.00	\$9.00
Dentist Office	2,000	\$14.27	\$17.12	\$16.63
Hairstylist	3,900	\$27.82	\$33.39	\$32.43
Department Store	170,000	\$140.00	\$189.00	\$160.00
Mall	1,627,100	\$140.00	\$189.00	\$160.00
Retail Video Store	14,400	\$102.73	\$123.28	\$119.74
Large Hotel	1,067,100	\$140.00	\$189.00	\$160.00
Large Building Supply	346,500	\$140.00	\$189.00	\$160.00
Hotel/Motel	27,960	\$140.00	\$189.00	\$160.00
Fast Food	60,160	\$140.00	\$189.00	\$160.00
Large High Rise Office Bldg	1,476,100	\$140.00	\$189.00	\$160.00
Hospital (< 3 MW)	1,509,600	\$2,700.00	\$3,652.00	\$5,000.00
Supermarket	233,600	\$140.00	\$189.00	\$160.00
Convenience Store	20,160	\$140.00	\$172.59	\$160.00
Hospital (> 3 MW)	2,700,000	\$2,700.00	\$3,652.00	\$5,500.00
Copper Mine	72,000,000	\$2,700.00	\$3,652.00	\$5,500.00

40. Staff recommends approval of the proposed Staff 2011 REST plan. Staff believes that its recommendation provides adequate funding to achieve UNS' 2011 REST goals, and moves toward more equitable allocation of costs between customer classes. Staff additionally believes that the lower per kWh charge contained in the Staff plan encourages energy conservation, by charging less to low use customers than would be the case under the current charge or UNS' proposed charge.

#### REST Adjustor Mechanism

41. The Commission established a REST adjustor mechanism for UNS in Decision No. 70360 (May 28, 2008). The REST adjustor rate is reset as part of the approval of each year's new REST implementation plan.

#### Staff Recommendations

42. Staff has recommended that the Commission approve the Staff proposed 2011 REST plan, reflecting a REST charge of \$0.008315 per kWh, and related caps reflected in the Staff proposal. This includes a total budget of \$9,329,572.

43. Staff has recommended approval of the trigger mechanism for reducing DG incentives proposed by UNS as modified.

1           44.     Staff has recommended that UNS post information on its own website, and on the  
2 Arizonagoessolar.org website at least every two weeks, regarding its progress toward reaching the  
3 trigger.

4           45.     Staff has recommended that, if UNS hits the trigger, UNS provide notice as soon as  
5 practicable, on its website on, Arizonagoessolar.org and through other available communication  
6 avenues to inform installers, customers, and others when the trigger was hit, when the incentive  
7 will be lowered, what the new incentive will be, and other pertinent information.

8           46.     Staff has recommended reducing the maximum percentage of a project that can be  
9 paid for with utility incentives to 50 percent.

10          47.     Staff has recommended approval of UNS' proposed research and development  
11 projects and funding.

12          48.     Staff has recommended that the Commission not approve UNS' request for lost net  
13 revenue resulting from DG deployments and related costs.

14          49.     Staff has recommended against approval of the School Vocational Program, as  
15 discussed herein.

16          50.     Staff has recommended that as part of UNS' 2012 REST plan filing, the Company  
17 review the success of the TEP School Vocational Program and make a proposal in its 2012 REST  
18 plan on whether to propose such a program in UNS' service territory for 2012.

19          51.     UNS should file its Renewable Energy Standard and Tariff Surcharge tariff  
20 consistent with the Decision in this case within 15 days of the effective date of the Decision.

21          52.     Staff has recommended approval of the Bright Arizona program, subject to the  
22 following conditions:

23           A.     All adjustors, except the PPFAC and REST, shall apply to the solar block  
24 energy purchased under the Bright Arizona program.

25           B.     The solar capacity rates of the Bright Arizona program be fixed for 20 years to  
26 reflect the typical length of a PPA.

27           C.     Any excess solar block energy shall be purchased back from the customer at  
28 the time the customer terminates participation in the program.

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

- D. The program shall contain an annual "true-up" accounting provision in October (September usage) to eliminate the possibility of customers accruing an excessive credit.
- E. The determination of the reasonableness and prudence of program costs be reviewed as part of UNS Electric's next rate case.
- F. UNS indicate on the tariff that subscription to the Bright Arizona program is based upon solar generation resources available.
- G. UNS include in its annual REST reports information on the amount (MW) of solar resources available for the Bright Arizona program and the amount (MW) of solar resources subscribed by customers participating in the program.
- H. The three proposed solar tariffs should be eliminated in favor of a single "solar" rider attached to the three existing base tariffs listed in the table above (that shall include the Delivery Service and Base Power shown in the table above), using the \$0.02 per kWh solar premium as the rider.
- I. UNS should file the Bright Arizona tariffs consistent with the Decision in this case within 30 days of the effective date of the Decision.

CONCLUSIONS OF LAW

- 1. UNS is an Arizona public service corporation within the meaning of Article XV, Section 2, of the Arizona Constitution.
- 2. The Commission has jurisdiction over UNS and over the subject matter of the application.
- 3. The Commission, having reviewed the application and Staff's Memorandum dated November 8, 2010, concludes that it is in the public interest to approve the 2011 Renewable Energy Standard Implementation Plan and REST Tariff, as discussed herein.

ORDER

1  
2 IT IS THEREFORE ORDERED that the 2011 Renewable Energy Standard  
3 Implementation Plan and REST Tariff, as discussed herein, be and hereby is approved.

4 IT IS FURTHER ORDERED that the Staff proposed 2011 REST plan, reflecting a REST  
5 charge of \$0.008315 per kWh, and related caps reflected in the Staff proposal is approved. This  
6 includes a total budget of \$9,329,572.

7 IT IS FURTHER ORDERED that the trigger mechanism for reducing DG incentives  
8 proposed by UNS Electric, Inc. as modified in Finding of Fact No. 29 is approved.

9 IT IS FURTHER ORDERED that UNS Electric, Inc. post information on its own website,  
10 and on the Arizonagoessolar.org website at least every two weeks, regarding its progress toward  
11 reaching the trigger.

12 IT IS FURTHER ORDERED that, if UNS Electric, Inc. hits the trigger, UNS Electric, Inc.  
13 provide notice as soon as practicable, on its website, on Arizonagoessolar.org and through other  
14 available communication avenues to inform installers, customers, and others when the trigger was  
15 hit, when the incentive will be lowered, what the new incentive will be, and other pertinent  
16 information.

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

19 IT IS FURTHER ORDERED that UNS Electric, Inc.'s proposed research and development  
20 projects and funding is approved.

21 IT IS FURTHER ORDERED that UNS Electric, Inc.'s request for lost net revenue  
22 resulting from DG deployments and related costs is denied.

23 IT IS FURTHER ORDERED that the School Vocational Program, as discussed herein, is  
24 denied.

25 IT IS FURTHER ORDERED that as part of UNS Electric, Inc.'s 2012 REST plan filing,  
26 the UNS Electric, Inc. review the success of the Tucson Electric Power Company School  
27 Vocational Program and make a proposal in its 2012 REST plan on whether to propose such a  
28 program in UNS Electric, Inc.'s service territory for 2012.

1           IT IS FURTHER ORDERED that UNS Electric, Inc. shall file, as a compliance matter with  
 2 Docket Control, its Renewable Energy Standard and Tariff Surcharge tariff consistent with the  
 3 Decision in this case within 15 days of the effective date of the Decision.

4           IT IS FURTHER ORDERED that the Bright Arizona program is approved, subject to the  
 5 following conditions:

- 6           • All adjustors, except the PPFAC and REST, shall apply to the solar block  
 7 energy purchased under the Bright Arizona program.
- 8           • The solar capacity rates of the Bright Arizona program be fixed for 20 years to  
 9 reflect the typical length of a PPA.
- 10          • Any excess solar block energy shall be purchased back from the customer at the  
 11 time the customer terminates participation in the program.
- 12          • The program shall contain an annual "true-up" accounting provision in October  
 13 (September usage) to eliminate the possibility of customers accruing an  
 14 excessive credit.
- 15          • The determination of the reasonableness and prudence of program costs be  
 16 reviewed as part of UNS Electric, Inc.'s next rate case.
- 17          • UNS Electric, Inc. indicate on the tariff that subscription to the Bright Arizona  
 18 program is based upon solar generation resources available.
- 19          • UNS Electric, Inc. include in its annual REST reports information on the  
 20 amount (MW) of solar resources available for the Bright Arizona program and  
 21 the amount (MW) of solar resources subscribed by customers participating in  
 22 the program.
- 23          • The three proposed solar tariffs should be eliminated in favor of a single "solar"  
 24 rider attached to the three existing base tariffs listed in the table above (that  
 25 shall include the Delivery Service and Base Power shown in the table above),  
 26 using the \$0.02 per kWh solar premium as the rider.

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

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

J. UNS Electric, Inc. should file the Bright Arizona tariffs, as a compliance matter with Docket Control, consistent with the Decision in this case within 30 days of the effective date of the Decision.

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

**BY THE ORDER OF THE ARIZONA CORPORATION COMMISSION**

CHAIRMAN	COMMISSIONER	
COMMISSIONER	COMMISSIONER	COMMISSIONER

IN WITNESS WHEREOF, I, ERNEST G. JOHNSON, Executive Director of the Arizona Corporation Commission, have hereunto, set my hand and caused the official seal of this Commission to be affixed at the Capitol, in the City of Phoenix, this \_\_\_\_\_ day of \_\_\_\_\_, 2010.

\_\_\_\_\_  
ERNEST G. JOHNSON  
EXECUTIVE DIRECTOR

DISSENT: \_\_\_\_\_

DISSENT: \_\_\_\_\_

SMO:RGG:lh\CH

1 SERVICE LIST FOR: UNS ELECTRIC, INC.  
2 DOCKET NO. E-04204A-10-0265

3 Mr. Philip Dion  
4 One South Church Avenue, Suite 200  
5 Tucson, Arizona 85701-1623

6 Mr. Michael Patten  
7 Roshka DeWulf & Patten, PLC  
8 One Arizona Center  
9 400 E. Van Buren St. - 800  
10 Phoenix, Arizona 85004

11 Mr. Steven M. Olea  
12 Director, Utilities Division  
13 Arizona Corporation Commission  
14 1200 West Washington Street  
15 Phoenix, Arizona 85007

16 Ms. Janice M. Alward  
17 Chief Counsel, Legal Division  
18 Arizona Corporation Commission  
19 1200 West Washington Street  
20 Phoenix, Arizona 85007

21  
22  
23  
24  
25  
26  
27  
28