ORIGINAL

OPEN MEMORANDUM

MEMORANDUM

TO: THE COMMISSION

FROM: Utilities Division

DATE: October 18, 2012

RE: UNS ELECTRIC INC. - APPLICATION FOR APPROVAL OF ITS 2013 RENEWABLE ENERGY STANDARD AND TARIFF IMPLEMENTATION PLAN (DOCKET NO. E-04204A-12-0297)

On July 2, 2012, UNS Electric Inc. ("UNS" or "Company") filed for Arizona Corporation Commission ("Commission") approval of its 2013 Renewable Energy Standard and Tariff ("REST") Implementation Plan. On July 3, 2012, UNS filed a REST plan summary and a set of PowerPoint slides summarizing its REST plan. No comments or requests for intervention have been filed in this docket.

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, compliance matters related to Decision No. 72738, a change to AZ Goes Solar reporting requirements, and research and development funding for 2013.

UNS also requests guidance from the Commission regarding certain matters related to meeting the Distributed Generation ("DG") requirement in a post incentive environment.

UNS' Five Year Projection of Energy, Capacity, and Costs

The table below shows UNS' forecast for energy, capacity, and costs for its annual REST plans from 2013 through 2017.

UNS Electric Energy, Capacity, and Cost Forecast					
	2013	2014	2015	2016	2017
Forecast Retail Sales MWH	1,774,685	1,794,373	1,823,371	1,855,314	1,885,441
% Renewable Energy Required	4.0%	4.5%	5.0%	6.0%	7.0%
Overall Renewable Requirement MWH	70,987	80,747	91,169	111,319	131,981
Utility Scale Requirement MWH	49,691	56,523	63,818	77,923	92,387
Utility Scale Cumulative MW	28	32	36	45	53
DG Requirement MWH					

	21,296	24,224	27,351	33,396	39,594
RES DG Requirement MWH	10,648	12,112	13,675	16,698	19,797
RES DG Cumulative MW	6	7	8	10	11
Non-Res DG Requirement MWH	10,648	12,112	13,675	16,698	19,797
Non-Res Cumulative MW	6	7	8	10	11
Total Cumulative Required MW	41	46	52	64	75
Total Program Cost	$8,911,454	$8,151,436	$8,708,640	$8,773,471	$8,966,701

UNS REST Experience Under 2012 REST Plan

The Commission-approved implementation plan for 2012 contemplated a budget of $7.7 million.[1] UNS projects spending virtually its entire REST budget in 2012.

Regarding installations and reservations, the table below summarizes installations and reservations for installations for UNS in 2012. Because UNS has exhausted its incentive budgets, these numbers are not expected to change through the end of 2012.

Residential	**Photovoltaics**		**Solar Hot Water**	
	Number of Systems	**kW (kWh)**	**Number of Systems**	**kWh**
2012 Installations	147	1,239 (2,106,300)	39	106,391
Reservations	220	1,861 (3,163,700)	41	112,644

Commercial	**Photovoltaics**		**Solar Hot Water**	
	Number of Systems	**kW (kWh)**	**Number of Systems**	**kW**
2011 Installations	16	961 (1,633,700)	2	7,000
Reservations	35	7,883 (13,401,100)	4	759,362

UNS has indicated to Staff that the Company has not seen any biomass/gas, geothermal, ground source heat pump, hydro, or wind DG installations in 2012.

The table below shows UNS' annual required MWh under the REST rules and its installed-annualized and installed-annualized/reserved numbers for 2012. Installed annualized

[1] Decision No. 72738 (January 18, 2012); Docket No. E-04204A-11-0267.

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	10,231	8,546 (installed – annualized) 11,915 (installed – annualized/reserved)
Commercial DG	10,231	2,958 (installed – annualized) 5,476 (installed – annualized/reserved)
Non-DG	49,691	112,752

Leased Versus Non-Leased Systems

The table below shows the number of leased versus non-leased residential and commercial DG systems for UNS in 2011 and 2012.

Residential

Month	Number of Leased Systems	Number of Non-Leased Systems
January 2011	0	28
February 2011	0	7
March 2011	3	18
April 2011	1	19
May 2011	2	17
June 2011	3	13
July 2011	2	7
August 2011	6	15
September 2011	22	10
October 2011	16	14
November 2011	62	13
December 2011	3	0
January 2012	12	12
February 2012	20	5
March 2012	30	16
April 2012	76	20
May 2012	19	10
June 2012	0	0
July 2012	0	0

Commercial

Month	Number of Leased Systems	Number of Non-Leased Systems
January 2011	0	6
February 2011	0	5
March 2011	1	1
April 2011	0	0
May 2011	0	1
June 2011	0	1
July 2011	0	2
August 2011	0	7
September 2011	4	2
October 2011	0	6
November 2011	0	0
December 2011	0	0
January 2012	0	3
February 2012	0	3
March 2012	0	1
April 2012	0	1
May 2012	0	1
June 2012	0	0
July 2012	0	0

Schools Vocational Program

In UNS' 2012 REST plan, funds were provided for placement of photovoltaic systems at high schools in UNS' service area in conjunction with educational efforts. A total of 5 schools participated in the program in 2012. UNS is not proposing to continue the program into 2013 because there are no further high schools to provide photovoltaic systems to in UNS' service territory. Staff believes that this is a reasonable result given the lack of further high schools in UNS' service territory to serve under the program.

Customer Education and Outreach

UNS is proposing to spend $50,000 on customer education and outreach in 2013, whereas the Commission approved $10,000 in UNS' 2012 REST budget. UNS has indicated that $10,000 is insufficient to do meaningful education and outreach in UNS' service territory. Staff believes that an increase from $10,000 to $30,000 is warranted to provide additional funds to UNS for customer education and outreach in 2013 and recommends approval of this amount for this budget item.

Information Systems Integration Costs

UNS' filing requests funding of $50,000 for information systems integration costs ("IT") in 2013. In 2012 the Commission approved funding of $50,000 with the understanding that UNS was completing a major upgrade of its IT systems and that the upgrade would be finished in 2012. UNS has indicated to Staff that the upgrade is scheduled for completion in late 2012. Therefore, Staff believes a lower IT number is warranted in UNS' 2013 REST budget and Staff recommends funding IT in UNS' 2013 REST budget at a level of $25,000.

Research and Development

UNS' filing requests approval of research and development funding totaling $27,500 as part of the 2013 REST budget, the same amount the Commission approved for UNS' 2012 REST budget. This includes $20,000 to fund AZRISE activities (in conjunction with funding also being received by AZRISE from TEP) as well as $7,500 toward industry organization dues. Staff believes that continuing UNS' R&D funding at $27,500 annually is reasonable and should be approved.

Carve-out for Solar Hot Water Heating in the Residential DG Program

UNS' 2013 REST plan includes a proposal to carve-out ten percent of the kWh of the residential DG program for solar hot water heating ("SHW"). As discussed in detail in the section of this memorandum dealing with incentive levels, Staff believes that a policy choice is before the Commission as to whether sectors that require higher incentive levels, including SHW, should continue to receive significant funding dollars, in an environment where other sectors of DG require little or no incentive money. Thus, Staff is recommending against the carve-out of a portion of the residential DG budget for SHW and is rather recommending a cap on how much of the residential DG budget can go to SHW. Such a cap is necessary in an environment where SHW has a much higher incentive level than other residential DG. Absent a cap, an uptick in SHW system installations could consume most of the annual residential DG Up-Front Incentive ("UFI") budget. Thus, Staff recommends approval of a $60,000 cap on the total amount of incentive money UNS can direct toward SHW installations in 2013, absent further Commission approval.

UNS Request for Flexibility to Adjust Incentive in Real Time Based on Market Conditions

UNS' application includes a request that the Commission grant UNS the "flexibility to adjust the incentive levels as appropriate based on real-time market signals." To date, UNS and other utilities have been required to come before the Commission to adjust incentive levels, other than adjustments (such as triggers) that were approved by the Commission in each company's annual REST plan. Other utilities, including UNS, have made filings with the Commission mid-year to adjust incentives and make other changes when market conditions have changed significantly and the Commission has acted quickly on such requests. While such flexibility might be useful to the Company, it would weaken the Commission's oversight of

UNS' renewable energy activities and Staff recommends against approval of the request by UNS for flexibility to adjust incentive levels on its own.

UNS Request to Set Residential Compliance Floor for 2013-2018

UNS' filing requests that the Commission set a residential DG compliance floor from 2013 to 2018 with a 0.75 percent increase each year, rather than the current structure of 0.5 percent increases in 2013 through 2015 and 1.0 percent increases in 2016 through 2018. The additional 0.25 percent in 2013, cumulative 0.50 percent in 2014, and cumulative 0.75 percent in 2015 represents additional residential DG to be undertaken in those years. By the end of 2018, the percentage would have moved back to being equal to what the existing REST rules require. The tables below show the existing overall and DG REST requirements and UNS' proposed adjustment to the REST requirement to provide additional residential DG in 2013-2015.

Year	Existing Overall REST Requirement	Existing Utility Scale Requirement	Existing Residential DG Requirement	Existing Commercial DG Requirement
2013	4.0%	70%	15%	15%
2014	4.5%	70%	15%	15%
2015	5.0%	70%	15%	15%
2016	6.0%	70%	15%	15%
2017	7.0%	70%	15%	15%
2018	8.0%	70%	15%	15%

Year	UNS Proposed Overall REST Requirement	UNS Proposed Utility Scale Requirement	UNS Proposed Residential DG Requirement	UNS Proposed Commercial DG Requirement
2013	4.0%	69.06%	15.94%	15%
2014	4.5%	68.33%	16.67%	15%
2015	5.0%	67.75%	17.25%	15%
2016	6.0%	68.75%	16.25%	15%
2017	7.0%	69.46%	15.54%	15%
2018	8.0%	70%	15%	15%

UNS cites a desire the provide market stability for the residential DG sector in coming years. This proposal relates to industry concerns expressed in the past that the DG percentage stops increasing after 2012, but the overall percentage does not begin to increase at a one percent pace until 2016, creating a three year period when the net growth in the DG component is less than in surrounding years.

Staff recognizes that there is an interest in providing an opportunity for a relatively level number of installs from year to year. However, Staff is reticent to recommend that the

Commission commit to such an adjustment six years into the future. Further, making such adjustments to the existing REST requirements would make assessing UNS' compliance in future years unnecessarily more complicated. Staff believes that the Commission can address this each year as it considers UNS' proposed REST plan for the coming year. Further, it is unclear what such an adjustment to REST requirements would mean in the next six years as the residential DG incentive and possibly other incentives approach and likely reach zero. Considering these matters as part of each year's REST plan will allow the Commission to retain full flexibility in future years as it assesses market conditions and other factors in future proceedings.

Compliance With Decision No. 72738 Requirement Regarding Those Who Receive An Incentive Continuing to Pay REST Surcharge

Decision No. 72738 states:

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

On June 15, 2012, UNS filed a request for an extension of time to comply with this requirement and to defer this matter to the docket where the Commission would consider UNS' 2013 REST plan. UNS indicated that it was unable to meet the October 2012 deadline due to greater than anticipated complexity in reprogramming its billing system and related matters. In this filing UNS suggested that the Commission should consider implementing the methodology for charging a REST surcharge that was adopted in Decision No. 73183 (May 24, 2012) in Arizona Public Service Company's ("APS") general rate proceeding. As part of UNS' July 2, 2012 filing for Commission approval of the Company's 2013 REST plan, the Company proposed that the Commission charge customers who have received an incentive a REST surcharge at the customer class REST surcharge cap or alternatively charge a REST surcharge at the average (mean) REST surcharge for each REST surcharge customer class.

Staff believes that either of UNS' alternatives contained in the Company's initial 2013 REST plan proposal could be adopted. Applying a REST surcharge equivalent to customer class caps, as was approved for APS, is the simplest solution and would provide consistency between UNS and APS. A difficulty in applying the APS method to UNS at this time is that the 2012 REST plan order applied the requirement to pay what the customer would have otherwise paid beginning with the effective date of the Commission's order on the 2012 REST plan in

January 2012. Many customers would pay less under a calculation of what they otherwise would have paid in comparison to if they had to pay at their customer class cap every month. Thus, such customers could claim that they did not know they would be subject to a higher REST surcharge (at the class cap) when they took the incentive and had their system installed.

The alternative of charging customers the average (mean) REST surcharge for each customer class would be a little more complicated, as the average surcharge numbers would be recalculated each year. Under either method, customers would not know with specificity what their total exposure to future payments would be.

Staff believes that either method could be implemented, but that fundamentally it is a policy decision for the Commission. As a placeholder in the attached Proposed Order, Staff recommends using the annual average.

As currently designed, this charge applies to customers who receive an incentive starting in January 2012. It is widely anticipated that the up-front incentives for residential and/or commercial PV will reach zero in the near future. Under the current design, customers who receive no incentive after incentive levels reach zero would not be subject to the surcharge under this provision. Thus there would be a window of customers who received an incentive starting in January 2012 and likely ending in 2013 or 2014 who would be subject to this provision, while all other customers who had systems installed would not. UNS expresses a concern regarding this small segment of customers that would be subject to this provision. To address this issue, UNS proposes to apply this provision to customers who sign up for net metering in the future in the absence of receiving a utility incentive. UNS notes that such customers, even in the absence of an incentive, enjoy the benefits of net metering.

Staff recognizes UNS' interest in adjusting this provision to apply not only to a possibly 1-2 year window of customers but to future customers as well and that the Commission may wish to extend this provision to apply to such customers. However, Staff recognizes that the provision as approved by the Commission in Decision No. 72738 does not provide for application to future customers who do not receive an incentive and thus Staff recommends against application of this provision to customers who do not receive an incentive in the future and who request net metering.

Request to Alter Reporting Requirements for the AZ Goes Solar Website

Decision No. 71465 (January 26, 2010) requires utilities to report cost data for renewable energy systems that receive utility incentives. This requirement led to the creation of the AZ Goes Solar website, where a variety of information is reported by Arizona utilities, including UNS. In this proceeding, UNS is requesting that these reporting requirements be adjusted to no longer require reporting of the total system cost for leased systems. UNS states that the total system cost for a leased system is not representative or useful given how current lease projects work. Staff is not aware of any concerns regarding UNS' proposal and Staff supports UNS' proposal to remove this reporting requirement. However, Staff believes UNS should monitor cost information for leased systems and if, in the future, there is useful total cost information to report for leased systems, UNS should bring this to the Commission's attention in a future REST plan filing.

Bright Arizona Solar Buildout Plan

The tables below show the costs anticipated to be recovered through the REST budget in 2013-2016 as well as the projects anticipated to be funded in that timeframe for UNS' Bright Arizona buildout plan.

Line Item	2013	2014	2015	2016
Carrying Costs	$494,648	$357,027	$658,578	$569,766
Book Depreciation	$652,734	$299,740	$575,500	$575,500
Property Tax Expense	$22,872	$0	$23,576	$46,544
Operations and Maintenance	$21,208	$12,500	$25,375	$26,136
Total	$1,191,463	$669,266	$1,283,029	$1,217,946

Projects	2013 Costs	2014 Costs	2015 Costs	2016 Costs
La Senita	$523,853			
Santa Cruz School	$475,776			
Santa Cruz School	$191,833	$657,277	$612,833	$590,990
Santa Cruz School		$11,990	$670,196	$626,956
Total	$1,191,463	$669,266	$1,283,029	$1,217,946

UNS Request for Guidance on Meeting the DG Requirement in a Post-Incentive Environment

As the REST rules exist today, in order for UNS to achieve compliance with the DG portion of the REST requirement, UNS pays an incentive to residential and commercial customers who install qualifying renewable energy facilities. As part of that transaction, the associated renewable energy credits ("RECs") goes to the utility, which are then retired to achieve compliance. UNS and other Arizona utilities are at or near the threshold of reaching a point where at least for the residential PV up front incentive, no incentive may be necessary for such systems to be installed. However, in such a scenario, UNS does not have a transaction with the customer whereby the customer provides UNS with the requisite RECs for UNS to meet its DG requirements under the REST rules. UNS' filing in this proceeding requests Commission guidance as to how UNS can have the opportunity to achieve compliance with the REST rules when one or more sectors of the market no longer require an incentive for projects to be undertaken. UNS' filing offers four possible solutions to the situation::

> "1. Change or waive the existing Resource Portfolio Standard ("RPS") to eliminate either the DG requirement, or the requirement to retire REC's associated with the customer-sited distributed generation system and allow the utility to report metered production data in order to show the percentage of sales associated with renewable energy.
>
> 2. Allow utilities to modify their existing net-metering tariffs to require customers to surrender all credits and environmental attributes in exchange for net-metering.
>
> 3. Allow utilities to meet the RPS DG requirement by showing a percentage of their sales through metered data without the requirement of retiring REC's (and without altering the existing rules).
>
> 4. In the absence of existing rule changes, allow the utilities to request waivers for meeting the DG requirement through the use of REC retirement and allow the utility to show compliance in an alternative manner."

UNS has not identified which of these options it prefers. UNS has indicated to Staff that the Company believes that the Commission needs to address this issue as part of the Commission's consideration of UNS' 2013 REST plan.

UNS is not the only utility placing this issue before the Commission. APS, in its application for approval of its 2013 REST plan, proposes two incentive options, one of which would start 2013 at a zero incentive for residential PV and one of which would start with a small residential PV incentive in 2013.[2] APS proposed to monitor compliance by using a "Track and Record" system under both options to give APS credit for all renewable installations in its service territory. Staff believes the Track and Record proposal is a reasonable way to both accurately measure a utility's compliance with REST rule requirements and to give the utility credit toward REST rule requirements for all renewable activity with its service territory that interconnects with the utility. Other proposals, such as several of the other options put forward by UNS put much more administrative burden on the utilities and the Commission to determine on-going compliance and may not accurately reflect the true level of installations taking place in a utility's service territory, a key component in assessing compliance with REST rules. Thus, Staff recommends that the Commission approve the "Track and Record" proposal for REST rule compliance requirements to be effective for 2013 and beyond for compliance reporting beginning April 1, 2014.

Further, Tucson Electric Power ("TEP")'s application for approval of its 2013 REST plan requests that the Commission allow TEP to count toward REST compliance seven projects at the time of TEP's 2013 REST plan filing, totaling more than 4 MW of DG, that requested net metering but did not request a utility incentive.[3] Staff is recommending approval of TEP's

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[2] Docket No. E-01345A-12-0290

[3] Docket No. E-01933A-12-0296.

request. Staff believes that such a provision should also be approved for UNS, particularly given that UNS and TEP are part of the same parent company. Therefore, Staff recommends that UNS count toward REST compliance all such installations within its service territory in 2012 and in following years.

2013 REST Budget Proposals and DG Incentive Levels

The UNS and Staff budget proposals will be discussed in the remainder of this document.

2013 REST Budget and Incentive Levels

UFI and PBI Levels

UNS has seen dramatic reductions in the incentive levels it has offered in many DG areas in recent years. UNS' 2012 plan started with residential and commercial UFIs set at $1.00 per watt. These triggered down several times in early 2012, ending up at $0.50 per watt. UNS' residential DG UFI budget was depleted on May 4, 2012 and the commercial DG UFI budget was depleted on May 14, 2012.

UNS' application requests approval of a $0.40 per watt UFI for both residential and commercial DG for 2013, with no trigger mechanism. UNS also is requesting the same commercial PV Performance Based Incentive ("PBI") cap levels as in 2012, of $0.072 per kWh for small systems, $0.068 per kWh for medium systems, and $0.064 per kWh for large systems. Similarly, UNS is requesting retention of the same $0.057 per kWh PBI for solar thermal applications and $0.50 per kWh for first year production for solar hot water heating.

Staff Proposal

In light of recent developments, the residential and/or commercial UFI sectors appear to have reached a point at this time where little or no utility incentive is required for installations to take place. However, the SHW and PBI markets have not arrived at such a point yet, and still require utility incentives to make installations happen. This raises the question of how ratepayer funding should be directed. Should funds be focused on areas that require much lower incentives, thus providing the most bang for the buck? Or should funds continue to be allocated toward all sectors to provide funding support to different parts of the renewable energy industry, albeit at a higher cost to ratepayers than if funds had been targeted only to the lower cost areas? This is fundamentally a policy call for the Commission to make as to how funds should be allocated between sectors that need lower or higher incentive levels. Staff's proposal for UNS takes a middle ground, providing continued funding to theSHW and PBI sectors, but at lower total dollar amounts, lower incentive levels, and lower caps, as appropriate for each sector.

For residential solar hot water heating, as noted elsewhere, Staff recommends against creating the carve-out for this sector as proposed by UNS, but rather recommends a $60,000 cap on how much of the residential DG UFI budget can be put toward SHW. Further, Staff recommends that the UFI for residential SHW be reduced from $0.50 per kWh for first year production to $0.40 per kWh for first year production. These proposals will provide the opportunity for significant SHW installations in 2013 at a still significant incentive level, but a modestly lower one that would buy more value per ratepayer dollar spent. Likewise, Staff recommends that the commercial SHW UFI be reduced from UNS' proposed $0.50 per kWh for first year production to $0.40 per kWh for first year production.

Similarly, for commercial SHW (also known as solar thermal), Staff recommends a reduction in the PBI from the proposed $0.057 per kWh to $0.047 per kWh. For commercial PBIs, Staff would reduce the caps from those proposed by UNS of $0.072 per kWh for 70-200 kW systems, $0.068 per kWh for 201-400 kW systems, and $0.064 per kWh for systems greater than 400 kW to caps of $0.068 per kWh for 70-200 kW systems, $0.64 per kWh for 201-400 kW systems, and $0.060 per kWh for systems greater than 400 kW. Further, Staff recommends approval of $30,000 to commercial PBIs, divided evenly between quarterly auctions. Under Staff's proposal, other incentives as proposed by UNS would be adopted.

The table below summarizes the major incentives proposed under the budget scenarios.

	UNS Proposal	Staff Proposal
Residential DG UFI	$0.40 per watt	$0.20 per watt
Commercial DG UFI	$0.40 per watt	$0.20 per watt
Residential SHW UFI	$0.50 per kWh	$0.40 per kWh
Commercial SHW UFI	$0.50 per kWh	$0.40 per kWh
Commercial SHW PBI	$0.57 per kWh	$0.47 per kWh
Commercial PBI	$0.72 per kWh small systems $0.68 per kWh medium systems $0.64 per kWh large systems	$0.68 per kWh small systems $0.64 per kWh medium systems $0.60 per kWh large systems

Triggers for Residential and Commercial UFIs

In recent years, UNS has had trigger mechanisms which cause incentive levels for residential and/or commercial DG UFIs to drop if certain milestones are reached by certain dates. In 2012, UNS' residential and commercial incentives have hit several such triggers, dropping these incentives to the current level of $0.50 per watt. Given the already current low level of UNS' UFI incentives, Staff does not believe that it is necessary or desirable to create a full series of triggers for 2013. Thus, Staff is proposing that UNS' residential and commercial UFIs trigger to zero at such time as the funding allotted to each sector reaches zero.

Proposed UNS and Staff Budgets

The table below summarizes the budgets being proposed by UNS and Staff.

Budget Components	2012 Approved Budget	2013 UNS Proposed Budget	2013 Staff Proposal Budget
Purchased Renewable Energy			
Above market cost of conventional generation	$2,126,740	$4,726,000	$4,726,000
UNS Owned	665,159	$1,191,463	$1,191,463
Subtotal	*$2,459,055*	*$5,917,463*	*$5,917,463*
Customer Sited Distributed Renewable Energy			
Residential UFI	$1,752,337	$421,876	$250,000
Residential SHW UFI		$102,539	
Commercial UFI	$691,614	$177,118	$100,000
Commercial PBI	$1,786,546	$1,836,416	1,816,546
Meter Reading	$6,250	$6,250	$6,250
Customer Education and Outreach	$10,000	$50,000	$30,000
Subtotal	*$4,297,273*	*$2,594,199*	*$2,202,796*
Technical Training			
Schools Program	$190,000	$0	$0
Internal and Contractor Training	$37,500	$37,500	$37,500
Subtotal	*$227,500*	*$37,500*	*$37,500*
Information Systems			
Subtotal	*$50,000*	*$50,000*	*$25,000*
Metering			
Subtotal	*$76,070*	*$76,070*	*$76,070*
Labor and Administration			
Internal Labor	$252,750	$207,722	$207,722
AZ Solar Website	$1,000	$1,000	$1,000
Subtotal	*$253,750*	*$208,722*	*$208,722*
Research and Development			
AZRISE	$20,000	$20,000	$20,000
Dues and Fees	$7,500	$7,500	$7,500
Subtotal	*$27,500*	*$27,500*	*$27,500*
Total Spending	*$7,315,078*	*$8,911,454*	*$8,495,051*
Carryover of Previous Year's Funds	*-$242,841*		
Total Amount for Recovery	*$7,673,206*	*$8,911,454*	*$8,495,051*

Recovery of Funds Through 2013 REST Charge

UNS' proposed caps and per kWh charge are designed to recover UNS' proposed amount of $8.9 million in 2013 and Staff's proposed caps and per kWh charge are designed to recover Staff's proposed budget of $8.5 million.

The table below shows the proposed surcharge per kWh for the UNS and Staff options as well as the proposed caps under each option, in comparison to what is currently in effect for 2012 and what was in effect in 2011.

	2011 Approved	2012 Approved	2013 UNS Proposal	2013 Staff Proposal
REST Charge (per kWh)	$0.008315	$0.008887	$0.012700	$0.01200
Class Caps				
Residential	$5.00	$4.50	$5.50	$5.35
Commercial	$160.00	$150.00	$190.00	$150.00
Industrial and Mining	$5,000.00	$5,500.00	$7,000.00	$10,000.00
Lighting	$140.00	$135.00	$175.00	$135.00

The cost recovery by customer class of the UNS and Staff options for the 2013 REST plan are shown in the table below. For comparison purposes, the table below also shows the projected MWH sales by customer class for 2013.

	2013 UNS Proposal	2013 Staff Proposal	2013 Projected Sales (MWH)
Residential	$4,425,833 (49.7%)	$4,285,489 (50.4%)	834,102 (47.1%)
Commercial	$4,055,902 (45.6%)	$3,577,938 (42.1%)	602,393 (34.0%)
Industrial and Mining	$421,103 (4.7%)	$628,103 (7.4%)	335,415 (18.9%)
Lighting	$6,613 (0.1%)	$5,906 (0.1%)	177 (0.0%)
Total	$8,909,452	$8,497,437	1,772,087

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)	2013 UNS Proposed (per kWh)	2013 Staff Proposed (per kWh)
Residential	$0.0053	$0.0051
Commercial	$0.0067	$0.0059
Industrial/ Mining	$0.0013	$0.0019
Lighting	$0.0037	$0.0034

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 Approved	2013 UNS Proposed	2013 Staff Proposed
Residential - Average Bill	$3.64	4.56	$4.41
Commercial - Average Bill	$22.76	$61.01	$53.82
Industrial and Mining - Average Bill	$3,857.92	$6,903.33	$9,146.67
Lighting - Average Bill	$2.23	$5.83	$5.21
Residential – Percent at Cap	70.6%	69.7%	69.7%
Commercial – Percent at Cap	5.0%	9.8%	17.6%
Industrial and Mining – Percent at Cap	46.2%	41.52%	30.0%
Lighting – Percent at Cap	0.1%	1.0%	1.0%

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

Example Customer Types	kWh / mo.	2012 Approved	2013 UNS Proposal	2013 Staff Proposal
Residence Consuming 400 kWh	400	$3.13	$5.08	$4.80
Residence Consuming 890 kWh	862	$4.50	$5.50	$5.35
Residence Consuming 2,000 kWh	2,000	$4.50	$5.50	$5.35
Dentist Office	2,000	$15.64	$25.40	$24.00
Hairstylist	3,900	$30.50	$49.53	$46.80
Department Store	170,000	$150.00	$190.00	$150.00
Mall	1,627,100	$150.00	$190.00	$150.00
Retail Video Store	14,400	$112.62	$182.88	$150.00
Large Hotel	1,067,100	$150.00	$190.00	$150.00
Large Building Supply	346,500	$150.00	$190.00	$150.00
Hotel/Motel	27,960	$150.00	$190.00	$150.00
Fast Food	60,160	$150.00	$190.00	$150.00
Large High Rise Office Bldg	1,476,100	$150.00	$190.00	$150.00
Hospital (< 3 MW)	1,509,600	$5,500.00	$7,000.00	$10,000.00
Supermarket	233,600	$150.00	$190.00	$150.00
Convenience Store	20,160	$150.00	$190.00	$150.00
Hospital (> 3 MW)	2,700,000	$5,500.00	$7,000.00	$10,000.00
Copper Mine	72,000,000	$5,500.00	$7,000.00	$10,000.00

Staff recommends approval of the Staff proposal. The Staff proposal provides continued funding to all sectors, while focusing more resources on the lowest cost sectors.

Staff Recommendations

1. Staff recommends that the Commission approve the Staff budget option for the 2013 REST plan, reflecting a REST surcharge of $0.01200 per kWh, and related caps. This includes a budget of $8,911,454.

2. Staff further recommends that the residential and commercial PV UFI be set at $0.20 per watt on January 1, 2013.

3. Staff further recommends that the residential and commercial PV UFI trigger down to zero at such time as the budgeted amount for each is fully expended in 2013.

4. Staff further recommends that the upper limit for the non-residential PBI be set at $0.068 per kWh for 70-200 kW systems, $0.064 per kWh for 201-400 kW systems, and $0.060 per kWh for systems greater than 400 kW, with a quarterly caps of $7,500 for a total annual cap of $30,000.

5. Staff further recommends that the commercial thermal PBI incentive be set at $0.047 per kWh.

6. Staff further recommends that the residential and commercial SHW UFI be set at $0.40 per kWh of first year production.

7. Staff further recommends against approval of the carve-out of funds for residential SHW and recommends that the residential SHW funding be limited to $70,000 in 2013.

8. Staff further recommends that reasonableness and prudency of the Bright Arizona Solar 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.

9. Staff further recommends against adoption of UNS' request to be able to adjust incentives in real time based upon market conditions and without Commission approval.

10. Staff further recommends against approval of the residential PV compliance floor proposed by UNS.

11. Staff further recommends approval of UNS' alternative for charging the REST surcharge to customers who receive a REST incentive by using the average REST surcharge paid by each customer class.

12. Staff further recommends approval of UNS' proposal to no longer report the total system cost for leased systems on the AZ Goes Solar website.

13. Staff further recommends that UNS count toward REST compliance all qualifying installations within its service territory in 2013 and future years.

14. Staff further recommends that the Commission approve the "Track and Record" proposal for REST rule compliance requirements to be effective for 2013 and beyond for compliance reporting beginning April 1, 2014.

15. 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.

Steven M. Olea
Director
Utilities Division

SMO:RGG:lhm\RM

ORIGINATOR: Robert Gray

BEFORE THE ARIZONA CORPORATION COMMISSION

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

IN THE MATTER OF THE APPLICATION OF UNS ELECTRIC, INC. FOR APPROVAL OF ITS 2013 RENEWABLE ENERGY STANDARD AND TARIFF IMPLEMENTATION PLAN	DOCKET NO. E-04204A-12-0297 DECISION NO. __________ ORDER

Open Meeting
To Be Determined
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 ("Commission").

2. On July 2, 2012, UNS filed for Arizona Corporation Commission ("Commission") approval of its 2013 Renewable Energy Standard and Tariff ("REST") Implementation Plan. On July 3, 2012, UNS filed a REST plan summary and a set of PowerPoint slides summarizing its REST plan. No comments or requests for intervention have been filed in this docket.

3. 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, compliance matters related to Decision No. 72738, a change to AZ Goes Solar reporting requirements, and research and development funding for 2013.

4. UNS also requests guidance from the Commission regarding certain matters related to meeting the Distributed Generation ("DG") requirement in a post-incentive environment.

UNS' Five Year Projection of Energy, Capacity, and Costs

5. The table below shows UNS' forecast for energy, capacity, and costs for its annual REST plans from 2013 through 2017.

UNS Electric Energy, Capacity, and Cost Forecast					
	2013	2014	2015	2016	2017
Forecast Retail Sales MWH	1,774,685	1,794,373	1,823,371	1,855,314	1,885,441
% Renewable Energy Required	4.0%	4.5%	5.0%	6.0%	7.0%
Overall Renewable Requirement MWH	70,987	80,747	91,169	111,319	131,981
Utility Scale Requirement MWH	49,691	56,523	63,818	77,923	92,387
Utility Scale Cumulative MW	28	32	36	45	53
DG Requirement MWH	21,296	24,224	27,351	33,396	39,594
RES DG Requirement MWH	10,648	12,112	13,675	16,698	19,797
RES DG Cumulative MW	6	7	8	10	11
Non-Res DG Requirement MWH	10,648	12,112	13,675	16,698	19,797
Non-Res Cumulative MW	6	7	8	10	11
Total Cumulative Required MW	41	46	52	64	75
Total Program Cost	$8,911,454	$8,151,436	$8,708,640	$8,773,471	$8,966,701

UNS REST Experience Under 2012 REST Plan

6. The Commission-approved implementation plan for 2012 contemplated a budget of $7.7 million.[1] UNS projects spending virtually its entire REST budget in 2012.

7. Regarding installations and reservations, the table below summarizes installations and reservations for installations for UNS in 2012. Because UNS has exhausted its incentive budgets, these numbers are not expected to change through the end of 2012.

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[1] Decision No. 72738 (January 18, 2012); Docket No. E-04204A-11-0267.

Residential	Photovoltaics		Solar Hot Water	
	Number of Systems	**kW (kWh)**	**Number of Systems**	**kWh**
2012 Installations	147	1,239 (2,106,300)	39	106,391
Reservations	220	1,861 (3,163,700)	41	112,644

Commercial	Photovoltaics		Solar Hot Water	
	Number of Systems	**kW (kWh)**	**Number of Systems**	**kW**
2011 Installations	16	961 (1,633,700)	2	7,000
Reservations	35	7,883 (13,401,100)	4	759,362

8. UNS has indicated to Staff that the Company has not seen any biomass/gas, geothermal, ground source heat pump, hydro, or wind DG installations in 2012.

9. The table below shows UNS' annual required MWh under the REST rules and its installed-annualized and installed-annualized/reserved numbers for 2012. 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	10,231	8,546 (installed – annualized) 11,915 (installed – annualized/reserved)
Commercial DG	10,231	2,958 (installed – annualized) 5,476 (installed – annualized/reserved)
Non-DG	49,691	112,752

Leased Versus Non-Leased Systems

10. The table below shows the number of leased versus non-leased residential and commercial DG systems for UNS in 2011 and 2012.

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Residential

Month	Number of Leased Systems	Number of Non-Leased Systems
January 2011	0	28
February 2011	0	7
March 2011	3	18
April 2011	1	19
May 2011	2	17
June 2011	3	13
July 2011	2	7
August 2011	6	15
September 2011	22	10
October 2011	16	14
November 2011	62	13
December 2011	3	0
January 2012	12	12
February 2012	20	5
March 2012	30	16
April 2012	76	20
May 2012	19	10
June 2012	0	0
July 2012	0	0

Commercial

Month	Number of Leased Systems	Number of Non-Leased Systems
January 2011	0	6
February 2011	0	5
March 2011	1	1
April 2011	0	0
May 2011	0	1
June 2011	0	1
July 2011	0	2
August 2011	0	7
September 2011	4	2
October 2011	0	6
November 2011	0	0
December 2011	0	0
January 2012	0	3
February 2012	0	3
March 2012	0	1
April 2012	0	1
May 2012	0	1
June 2012	0	0
July 2012	0	0

Schools Vocational Program

11. In UNS' 2012 REST plan, funds were provided for placement of photovoltaic systems at high schools in UNS' service area in conjunction with educational efforts. A total of 5 schools participated in the program in 2012. UNS is not proposing to continue the program into 2013 because there are no further high schools to provide photovoltaic systems to in UNS' service territory. Staff believes that this is a reasonable result given the lack of further high schools in UNS' service territory to serve under the program.

Customer Education and Outreach

12. UNS is proposing to spend $50,000 on customer education and outreach in 2013, whereas the Commission approved $10,000 in UNS' 2012 REST budget. UNS has indicated that $10,000 is insufficient to do meaningful education and outreach in UNS' service territory. Staff believes that an increase from $10,000 to $30,000 is warranted to provide additional funds to UNS for customer education and outreach in 2013 and recommends approval of this amount for this budget item.

Information Systems Integration Costs

13. UNS' filing requests funding of $50,000 for information systems integration costs ("IT") in 2013. In 2012, the Commission approved funding of $50,000 with the understanding that UNS was completing a major upgrade of its IT systems and that the upgrade would be finished in 2012. UNS has indicated to Staff that the upgrade is scheduled for completion in late 2012. Therefore, Staff believes a lower IT number is warranted in UNS' 2013 REST budget and Staff recommends funding IT in UNS' 2013 REST budget at a level of $25,000.

Research and Development

14. UNS' filing requests approval of research and development funding totaling $27,500 as part of the 2013 REST budget, the same amount the Commission approved for UNS' 2012 REST budget. This includes $20,000 to fund AZRISE activities (in conjunction with funding also being received by AZRISE from TEP) as well as $7,500 toward industry organization dues. Staff believes that continuing UNS' R&D funding at $27,500 annually is reasonable and should be approved.

Carve-out for Solar Hot Water Heating in the Residential DG Program

15. UNS' 2013 REST plan includes a proposal to carve-out ten percent of the kWh of the residential DG program for solar hot water heating ("SHW"). As discussed in detail in the section of this Order dealing with incentive levels, Staff believes that a policy choice is before the Commission as to whether sectors that require higher incentive levels, including SHW, should continue to receive significant funding dollars, in an environment where other sectors of DG require little or no incentive money. Thus, Staff is recommending against the carve-out of a portion of the residential DG budget for SHW and is rather recommending a cap on how much of the residential DG budget can go to SHW. Such a cap is necessary in an environment where SHW has a much higher incentive level than other residential DG. Absent a cap, an uptick in SHW system installations could consume most of the annual residential DG Up-Front Incentive ("UFI") budget. Thus, Staff recommends approval of a $60,000 cap on the total amount of incentive money UNS can direct toward SHW installations in 2013, absent further Commission approval.

UNS Request for Flexibility to Adjust Incentive in Real Time Based on Market Conditions

16. UNS' application includes a request that the Commission grant UNS the "flexibility to adjust the incentive levels as appropriate based on real-time market signals." To date, UNS and other utilities have been required to come before the Commission to adjust incentive levels, other than adjustments (such as triggers) that were approved by the Commission in each company's annual REST plan. Other utilities, including UNS, have made filings with the Commission mid-year to adjust incentives and make other changes when market conditions have changed significantly and the Commission has acted quickly on such requests. While such flexibility might be useful to the Company, it would weaken the Commission's oversight of UNS' renewable energy activities and Staff recommends against approval of the request by UNS for flexibility to adjust incentive levels on its own.

UNS Request to Set Residential Compliance Floor for 2013-2018

17. UNS' filing requests that the Commission set a residential DG compliance floor from 2013 to 2018 with a 0.75 percent increase each year, rather than the current structure of 0.5 percent increases in 2013 through 2015 and 1.0 percent increases in 2016 through 2018. The

additional 0.25 percent in 2013, cumulative 0.50 percent in 2014, and cumulative 0.75 percent in 2015 represents additional residential DG to be undertaken in those years. By the end of 2018, the percentage would have moved back to being equal to what the existing REST rules require. The tables below show the existing overall and DG REST requirements and UNS' proposed adjustment to the REST requirement to provide additional residential DG in 2013-2015.

Year	**Existing Overall REST Requirement**	**Existing Utility Scale Requirement**	**Existing Residential DG Requirement**	**Existing Commercial DG Requirement**
2013	4.0%	70%	15%	15%
2014	4.5%	70%	15%	15%
2015	5.0%	70%	15%	15%
2016	6.0%	70%	15%	15%
2017	7.0%	70%	15%	15%
2018	8.0%	70%	15%	15%

Year	**UNS Proposed Overall REST Requirement**	**UNS Proposed Utility Scale Requirement**	**UNS Proposed Residential DG Requirement**	**UNS Proposed Commercial DG Requirement**
2013	4.0%	69.06%	15.94%	15%
2014	4.5%	68.33%	16.67%	15%
2015	5.0%	67.75%	17.25%	15%
2016	6.0%	68.75%	16.25%	15%
2017	7.0%	69.46%	15.54%	15%
2018	8.0%	70%	15%	15%

18. UNS cites a desire the provide market stability for the residential DG sector in coming years. This proposal relates to industry concerns expressed in the past that the DG percentage stops increasing after 2012, but the overall percentage does not begin to increase at a one percent pace until 2016, creating a three year period when the net growth in the DG component is less than in surrounding years.

19. Staff recognizes that there is an interest in providing an opportunity for a relatively level number of installs from year to year. However, Staff is reticent to recommend that the Commission commit to such an adjustment six years into the future. Further, making such adjustments to the existing REST requirements would make assessing UNS' compliance in future years unnecessarily more complicated. Staff believes that the Commission can address this each

year as it considers UNS' proposed REST plan for the coming year. Further, it is unclear what such an adjustment to REST requirements would mean in the next six years as the residential DG incentive and possibly other incentives approach and likely reach zero. Considering these matters as part of each year's REST plan will allow the Commission to retain full flexibility in future years as it assesses market conditions and other factors in future proceedings.

Compliance With Decision No. 72738 Requirement Regarding Those Who Receive An Incentive Continuing to Pay REST Surcharge

20. Decision No. 72738 states:

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

21. On June 15, 2012, UNS filed a request for an extension of time to comply with this requirement and to defer this matter to the docket where the Commission would consider UNS' 2013 REST plan. UNS indicated that it was unable to meet the October 2012 deadline due to greater than anticipated complexity in reprogramming its billing system and related matters. In this filing UNS suggested that the Commission should consider implementing the methodology for charging a REST surcharge that was adopted in Decision No. 73183 (May 24, 2012) in APS' general rate proceeding. As part of UNS' July 2, 2012 filing for Commission approval of the Company's 2013 REST plan, the Company proposed that the Commission charge customers who have received an incentive a REST surcharge at the customer class REST surcharge cap or alternatively charge a REST surcharge at the average (mean) REST surcharge for each REST surcharge customer class.

22. Staff believes that either of UNS' alternatives contained in the Company's initial 2013 REST plan proposal could be adopted. Applying a REST surcharge equivalent to customer

class caps, as was approved for APS, is the simplest solution and would provide consistency between UNS and APS. A difficulty in applying the APS method to UNS at this time is that the 2012 REST plan order applied the requirement to pay what the customer would have otherwise paid beginning with the effective date of the Commission's order on the 2012 REST plan in January 2012. Many customers would pay less under a calculation of what they otherwise would have paid in comparison to if they had to pay at their customer class cap every month. Thus, such customers could claim that they did not know they would be subject to a higher REST surcharge (at the class cap) when they took the incentive and had their system installed.

23. The alternative of charging customers the average (mean) REST surcharge for each customer class would be a little more complicated, as the average surcharge numbers would be recalculated each year. Under either method, customers would not know with specificity what their total exposure to future payments would be.

24. Staff believes that either method could be implemented, but that fundamentally it is a policy decision for the Commission. Staff recommends using the annual average.

25. As currently designed, this charge applies to customers who receive an incentive starting in January 2012. It is widely anticipated that the up-front incentives for residential and/or commercial PV will reach zero in the near future. Under the current design, customers who receive no incentive after incentive levels reach zero would not be subject to the surcharge under this provision. Thus there would be a window of customers who received an incentive starting in January 2012 and likely ending in 2013 or 2014 who would be subject to this provision, while all other customers who had systems installed would not. UNS expresses a concern regarding this small segment of customers that would be subject to this provision. To address this issue, UNS proposes to apply this provision to customers who sign up for net metering in the future in the absence of receiving a utility incentive. UNS notes that such customers, even in the absence of an incentive, enjoy the benefits of net metering.

26. Staff recognizes UNS' interest in adjusting this provision to apply not only to a possibly 1-2 year window of customers, but to future customers as well and that the Commission may wish to extend this provision to apply to such customers. However, Staff recognizes that the

provision as approved by the Commission in Decision No. 72738 does not provide for application to future customers who do not receive an incentive and thus Staff recommends against application of this provision to customers who do not receive an incentive in the future and who request net metering.

Request to Alter Reporting Requirements for the AZ Goes Solar Website

27. Decision No. 71465 (January 26, 2010) requires utilities to report cost data for renewable energy systems that receive utility incentives. This requirement led to the creation of the AZ Goes Solar website, where a variety of information is reported by Arizona utilities, including UNS. In this proceeding, UNS is requesting that these reporting requirements be adjusted to no longer require reporting of the total system cost for leased systems. UNS states that the total system cost for a leased system is not representative or useful given how current lease projects work. Staff is not aware of any concerns regarding UNS' proposal and Staff supports UNS' proposal to remove this reporting requirement. However, Staff believes UNS should monitor cost information for leased systems and if, in the future, there is useful total cost information to report for leased systems, UNS should bring this to the Commission's attention in a future REST plan filing.

Bright Arizona Solar Buildout Plan

28. The tables below show the costs anticipated to be recovered through the REST budget in 2013-2016 as well as the projects anticipated to be funded in that timeframe for UNS' Bright Arizona buildout plan.

Line Item	2013	2014	2015	2016
Carrying Costs	$494,648	$357,027	$658,578	$569,766
Book Depreciation	$652,734	$299,740	$575,500	$575,500
Property Tax Expense	$22,872	$0	$23,576	$46,544
Operations and Maintenance	$21,208	$12,500	$25,375	$26,136
Total	$1,191,463	$669,266	$1,283,029	$1,217,946

Projects	2013 Costs	2014 Costs	2015 Costs	2016 Costs
La Senita	$523,853			
Santa Cruz School	$475,776			

Santa Cruz School	$191,833	$657,277	$612,833	$590,990
Santa Cruz School		$11,990	$670,196	$626,956
Total	$1,191,463	$669,266	$1,283,029	$1,217,946

UNS Request for Guidance on Meeting the DG Requirement in a Post-Incentive Environment

29. As the REST rules exist today, in order for UNS to achieve compliance with the DG portion of the REST requirement, UNS pays an incentive to residential and commercial customers who install qualifying renewable energy facilities. As a part of that transaction, the associated renewable energy credits ("RECs") goes to the which are then retired to achieve compliance. UNS and other Arizona utilities are at or near the threshold of reaching a point where at least for the residential PV up front incentive, no incentive may be necessary for such systems to be installed. However, in such a scenario, UNS does not have a transaction with the customer whereby the customer provides UNS with the requisite RECs for UNS to meet its DG requirements under the REST rules. UNS' filing in this proceeding requests Commission guidance as to how UNS can have the opportunity to achieve compliance with the REST rules when one or more sectors of the market no longer require an incentive for projects to be undertaken. UNS' filing offers four possible solutions to the situation, as follows:

> "1. Change or waive the existing Resource Portfolio Standard ("RPS") to eliminate either the DG requirement, or the requirement to retire REC's associated with the customer-sited distributed generation system and allow the utility to report metered production data in order to show the percentage of sales associated with renewable energy.
> 2. Allow utilities to modify their existing net-metering tariffs to require customers to surrender all credits and environmental attributes in exchange for net-metering.
>
> 3. Allow utilities to meet the RPS DG requirement by showing a percentage of their sales through metered data without the requirement of retiring REC's (and without altering the existing rules).
>
> 4. In the absence of existing rule changes, allow the utilities to request waivers for meeting the DG requirement through the use of REC retirement and allow the utility to show compliance in an alternative manner."

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30. UNS has not identified which of these options it prefers. UNS has indicated to Staff that the Company believes that the Commission needs to address this issue as part of the Commission's consideration of UNS' 2013 REST plan.

31. UNS is not the only utility placing this issue before the Commission. APS, in its application for approval of its 2013 REST plan, proposes two incentive options, one of which would start 2013 at a zero incentive for residential PV and one of which would start with a small residential PV incentive in 2013.[2] APS proposed to monitor compliance by using a "Track and Record" system under both options to give APS credit for all renewable installations in its service territory. Staff believes the track and record proposal is a reasonable way to both accurately measure a utility's compliance with REST rule requirements and to give the utility credit toward REST rule requirements for all renewable activity with its service territory that interconnects with the utility. Other proposals, such as several of the other options put forward by UNS put much more administrative burden on the utilities and the Commission to determine on-going compliance and may not accurately reflect the true level of installations taking place in a utility's service territory, a key component in assessing compliance with REST rules. Thus, Staff recommends that the Commission approve the "Track and Record" proposal for REST rule compliance requirements to be effective for 2013 and beyond for compliance reporting beginning April 1, 2014.

32. Further, Tucson Electric Power ("TEP")'s application for approval of its 2013 REST plan requests that the Commission allow TEP to count toward REST compliance seven projects at the time of TEP's 2013 REST plan filing, totaling more than 4 MW of DG, that requested net metering but did not request a utility incentive.[3] Staff is recommending approval of TEP's request. Staff believes that such a provision should also be approved for UNS, particularly given that UNS and TEP are part of the same parent company. Therefore, Staff recommends that UNS count toward REST compliance all such installations within its service territory in 2012 and in following years.

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[2] Docket No. E-01345A-12-0290.
[3] Docket No. E-01933A-12-0296.

2013 REST Budget Proposals and DG Incentive Levels

33. The UNS and Staff budget proposals will be discussed in the remainder of this document.

2013 REST Budget and Incentive Levels

UFI and PBI Levels

34. UNS has seen dramatic reductions in the incentive levels it has offered in many DG areas in recent years. UNS' 2012 plan started with residential and commercial UFIs set at $1.00 per watt. These triggered down several times in early 2012, ending up at $0.50 per watt. UNS' residential DG UFI budget was depleted on May 4, 2012 and the commercial DG UFI budget was depleted on May 14, 2012.

35. UNS' application requests approval of a $0.40 per watt UFI for both residential and commercial DG for 2013, with no trigger mechanism. UNS also is requesting the same commercial PV Performance Based Incentive cap levels as in 2012, of $0.072 per kWh for small systems, $0.068 per kWh for medium systems, and $0.064 per kWh for large systems. Similarly, UNS is requesting retention of the same $0.057 per kWh PBI for solar thermal applications and $0.50 per kWh for first year production for solar hot water heating.

Staff Proposal

36. In light of recent developments, the residential and/or commercial UFI sectors appear to have reached a point at this time where little or no utility incentive is required for installations to take place. However, the SHW and PBI markets have not arrived at such a point yet, and still require utility incentives to make installations happen. This raises the question of how ratepayer funding should be directed. Should funds be focused on areas that require much lower incentives, thus providing the most bang for the buck? Or should funds continue to be allocated toward all sectors to provide funding support to different parts of the renewable energy industry, albeit at a higher cost to ratepayers than if funds had been targeted only to the lower cost areas? This is fundamentally a policy call for the Commission to make as to how funds should be allocated between sectors that need lower or higher incentive levels. Staff's proposal for UNS takes a middle

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ground, providing continued funding to the SHW and PBI sectors, but at lower total dollar amounts, lower incentive levels, and lower caps, as appropriate for each sector.

37. For residential SHW, as noted elsewhere, Staff recommends against creating the carve-out for this sector as proposed by UNS, but rather recommends a $60,000 cap on how much of the residential DG UFI budget can be put toward SHW. Further, Staff recommends that the UFI for residential SHW be reduced from $0.50 per kWh for first year production to $0.40 per kWh for first year production. These proposals will provide the opportunity for significant SHW installations in 2013 at a still significant incentive level, but a modestly lower one that would buy more value per ratepayer dollar spent. Likewise, Staff recommends that the commercial SHW UFI be reduced from UNS' proposed $0.50 per kWh for first year production to $0.40 per kWh for first year production.

38. Similarly, for commercial SHW (also known as solar thermal), Staff recommends a reduction in the PBI from the proposed $0.057 per kWh to $0.047 per kWh. For commercial PBIs, Staff would reduce the caps from those proposed by UNS of $0.072 per kWh for 70-200 kW systems, $0.068 per kWh for 201-400 kW systems, and $0.064 per kWh for systems greater than 400 kW to caps of $0.068 per kWh for 70-200 kW systems, $0.64 per kWh for 201-400 kW systems, and $0.060 per kWh for systems greater than 400 kW. Further, Staff recommends approval of $30,000 to commercial PBIs, divided evenly between quarterly auctions. Under Staff's proposal, other incentives as proposed by UNS would be adopted.

39. The table below summarizes the major incentives proposed under the budget scenarios.

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	UNS Proposal	Staff Proposal
Residential DG UFI	$0.40 per watt	$0.20 per watt
Commercial DG UFI	$0.40 per watt	$0.20 per watt
Residential SHW UFI	$0.50 per kWh	$0.40 per kWh
Commercial SHW UFI	$0.50 per kWh	$0.40 per kWh
Commercial SHW PBI	$0.57 per kWh	$0.47 per kWh
Commercial PBI	$0.72 per kWh small systems $0.68 per kWh medium systems $0.64 per kWh large systems	$0.68 per kWh small systems $0.64 per kWh medium systems $0.60 per kWh large systems

Triggers for Residential and Commercial UFIs

40. In recent years, UNS has had trigger mechanisms which cause incentive levels for residential and/or commercial DG UFIs to drop if certain milestones are reached by certain dates. In 2012, UNS' residential and commercial incentives have hit several such triggers, dropping these incentives to the current level of $0.50 per watt. Given the already current low level of UNS' UFI incentives, Staff does not believe that it is necessary or desirable to create a full series of triggers for 2013. Thus, Staff is proposing that UNS' residential and commercial UFIs trigger to zero at such time as the funding allotted to each sector reaches zero.

Proposed UNS and Staff Budgets

41. The table below summarizes the budgets being proposed by UNS and Staff.

Budget Components	**2012 Approved Budget**	**2013 UNS Proposed Budget**	**2013 Staff Proposal Budget**
Purchased Renewable Energy			
Above market cost of conventional generation	$2,126,740	$4,726,000	$4,726,000
UNS Owned	665,159	$1,191,463	$1,191,463
Subtotal	*$2,459,055*	*$5,917,463*	*$5,917,463*
Customer Sited Distributed Renewable Energy			
Residential UFI	$1,752,337	$421,876	$250,000
Residential SHW UFI		$102,539	
Commercial UFI	$691,614	$177,118	$100,000
Commercial PBI	$1,786,546	$1,836,416	1,816,546
Meter Reading	$6,250	$6,250	$6,250

Customer Education and Outreach	$10,000	$50,000	$30,000
Subtotal	*$4,297,273*	*$2,594,199*	*$2,202,796*
Technical Training			
Schools Program	$190,000	$0	$0
Internal and Contractor Training	$37,500	$37,500	$37,500
Subtotal	*$227,500*	*$37,500*	*$37,500*
Information Systems			
Subtotal	*$50,000*	*$50,000*	*$25,000*
Metering			
Subtotal	*$76,070*	*$76,070*	*$76,070*
Labor and Administration			
Internal Labor	$252,750	$207,722	$207,722
AZ Solar Website	$1,000	$1,000	$1,000
Subtotal	*$253,750*	*$208,722*	*$208,722*
Research and Development			
AZRISE	$20,000	$20,000	$20,000
Dues and Fees	$7,500	$7,500	$7,500
Subtotal	*$27,500*	*$27,500*	*$27,500*
Total Spending	*$7,315,078*	*$8,911,454*	*$8,495,051*
Carryover of Previous Year's Funds	*-$242,841*		
Total Amount for Recovery	*$7,673,206*	*$8,911,454*	*$8,495,051*

Recovery of Funds Through 2013 REST Charge

42. UNS' proposed caps and per kWh charge are designed to recover UNS' proposed amount of $8.9 million in 2013 and Staff's proposed caps and per kWh charge are designed to recover Staff's proposed budget of $8.5 million.

43. The table below shows the proposed surcharge per kWh for the UNS and Staff options as well as the proposed caps under each option, in comparison to what is currently in effect for 2012 and what was in effect in 2011.

	2011 Approved	**2012 Approved**	**2013 UNS Proposal**	**2013 Staff Proposal**
REST Charge (per kWh)	$0.008315	$0.008887	$0.012700	$0.01200
Class Caps				
Residential	$5.00	$4.50	$5.50	$5.35
Commercial	$160.00	$150.00	$190.00	$150.00
Industrial and Mining	$5,000.00	$5,500.00	$7,000.00	$10,000.00
Lighting	$140.00	$135.00	$175.00	$135.00

44. The cost recovery by customer class of the UNS and Staff options for the 2013 REST plan are shown in the table below. For comparison purposes, the table below also shows the projected MWH sales by customer class for 2013.

	2013 UNS Proposal	2013 Staff Proposal	2013 Projected Sales (MWH)
Residential	$4,425,833 (49.7%)	$4,285,489 (50.4%)	834,102 (47.1%)
Commercial	$4,055,902 (45.6%)	$3,577,938 (42.1%)	602,393 (34.0%)
Industrial and Mining	$421,103 (4.7%)	$628,103 (7.4%)	335,415 (18.9%)
Lighting	$6,613 (0.1%)	$5,906 (0.1%)	177 (0.0%)
Total	$8,909,452	$8,497,437	1,772,087

45. 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)	2013 UNS Proposed (per kWh)	2013 Staff Proposed (per kWh)
Residential	$0.0053	$0.0051
Commercial	$0.0067	$0.0059
Industrial/ Mining	$0.0013	$0.0019
Lighting	$0.0037	$0.0034

46. 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 Approved	2013 UNS Proposed	2013 Staff Proposed
Residential - Average Bill	$3.64	4.56	$4.41
Commercial - Average Bill	$22.76	$61.01	$53.82

Industrial and Mining - Average Bill	$3,857.92	$6,903.33	$9,146.67
Lighting - Average Bill	$2.23	$5.83	$5.21
Residential – Percent at Cap	70.6%	69.7%	69.7%
Commercial – Percent at Cap	5.0%	9.8%	17.6%
Industrial and Mining – Percent at Cap	46.2%	41.52%	30.0%
Lighting – Percent at Cap	0.1%	1.0%	1.0%

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

Example Customer Types	**kWh / mo.**	**2012 Approved**	**2013 UNS Proposal**	**2013 Staff Proposal**
Residence Consuming 400 kWh	400	$3.13	$5.08	$4.80
Residence Consuming 890 kWh	862	$4.50	$5.50	$5.35
Residence Consuming 2,000 kWh	2,000	$4.50	$5.50	$5.35
Dentist Office	2,000	$15.64	$25.40	$24.00
Hairstylist	3,900	$30.50	$49.53	$46.80
Department Store	170,000	$150.00	$190.00	$150.00
Mall	1,627,100	$150.00	$190.00	$150.00
Retail Video Store	14,400	$112.62	$182.88	$150.00
Large Hotel	1,067,100	$150.00	$190.00	$150.00
Large Building Supply	346,500	$150.00	$190.00	$150.00
Hotel/Motel	27,960	$150.00	$190.00	$150.00
Fast Food	60,160	$150.00	$190.00	$150.00
Large High Rise Office Bldg	1,476,100	$150.00	$190.00	$150.00
Hospital (< 3 MW)	1,509,600	$5,500.00	$7,000.00	$10,000.00
Supermarket	233,600	$150.00	$190.00	$150.00

Convenience Store	20,160	$150.00	$190.00	$150.00
~~Hospital (>3 MW)~~	~~2,700,000~~	~~$5,500.00~~	~~$7,000.00~~	~~$10,000.00~~
Copper Mine	72,000,000	$5,500.00	$7,000.00	$10,000.00

48. Staff recommends approval of the Staff proposal. The Staff proposal provides continued funding to all sectors, while focusing more resources on the lowest cost sectors.

Staff Recommendations

49. Staff has recommended that the Commission approve the Staff budget option for the 2013 REST plan, reflecting a REST surcharge of $0.01200 per kWh, and related caps. This includes a budget of $8,911,454.

50. Staff has further recommended that the residential and commercial PV UFI be set at $0.20 per watt on January 1, 2013.

51. Staff has further recommended that the residential and commercial PV UFI trigger down to zero at such time as the budgeted amount for each is fully expended in 2013.

52. Staff has further recommended that the upper limit for the non-residential PBI be set at $0.068 per kWh for 70-200 kW systems, $0.064 per kWh for 201-400 kW systems, and $0.060 per kWh for systems greater than 400 kW, with a quarterly caps of $7,500 for a total annual cap of $30,000.

53. Staff has further recommended that the commercial thermal PBI incentive be set at $0.047 per kWh.

54. Staff has further recommended that the residential and commercial SHW up-front incentive be set at $0.40 per kWh of first year production.

55. Staff has further recommended against approval of the carve-out of funds for residential SHW , but rather recommends that the residential SHW funding be limited to $70,000 in 2013.

56. Staff has further recommended that reasonableness and prudency of the Bright Arizona Solar 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.

57. Staff has further recommended against adoption of UNS' request to be able to adjust incentives in real time based upon market conditions and without Commission approval.

58. Staff has further recommended against approval of the residential PV compliance floor proposed by UNS.

59. Staff has further recommended approval of UNS' alternative for charging the REST surcharge to customers who receive a REST incentive by using the average REST surcharge paid by each customer class.

60. Staff has further recommended approval of UNS' proposal to no longer report the total system cost for leased systems on the AZ Goes Solar website.

61. Staff has further recommended that UNS count toward REST compliance all qualifying installations within its service territory in 2013 and future years.

62. Staff has further recommended approval of the Track and Record method for UNS to achieve compliance with REST requirements beginning in January 2013.

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

64. Staff has further recommended approval of the "Track and Record" method for REST rule compliance requirements, as discussed herein, be effective for 2013 and beyond for compliance reporting beginning April 1, 2014.

CONCLUSIONS OF LAW

1. UNS Electric, Inc. 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 Electric, Inc. and over the subject matter of the application.

3. The Commission, having reviewed the application and Staff's Memorandum dated October 18, 2012, concludes that it is in the public interest to approve UNS Electric, Inc.'s 2013 Renewable Energy Standard and Tariff Implementation Plan as discussed herein.

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ORDER

IT IS THEREFORE ORDERED that the Staff budget option for the 2013 REST plan, reflecting a REST surcharge of \$0.01200 per kWh, and related caps, be and hereby is approved. This includes a budget of \$8,911,454.

IT IS FURTHER ORDERED that the residential and commercial PV UFI be set at \$0.20 per watt on January 1, 2013.

IT IS FURTHER ORDERED that the residential and commercial PV UFI trigger down to zero at such time as the budgeted amount for each is fully expended in 2013.

IT IS FURTHER ORDERED that the upper limit for the non-residential PBI be set at \$0.068 per kWh for 70-200 kW systems, \$0.064 per kWh for 201-400 kW systems, and \$0.060 per kWh for systems greater than 400 kW, with a quarterly caps of \$7,500 for a total annual cap of \$30,000.

IT IS FURTHER ORDERED that the commercial thermal PBI incentive be set at \$0.047 per kWh.

IT IS FURTHER ORDERED that the residential and commercial SHW UFI be set at \$0.40 per kWh of first year production.

IT IS FURTHER ORDERED that UNS Electric, Inc.'s request to carve-out funds for residential SHW is denied, and that the residential solar hot water heating funding be limited to \$70,000 in 2013.

IT IS FURTHER ORDERED that the reasonableness and prudency of the Bright Arizona Solar Buildout Plan costs be examined in UNS Electric, Inc.'s next rate case and that any costs determined not to be reasonable and prudent be refunded by UNS Electric, Inc.

IT IS FURTHER ORDERED that UNS Electric, Inc. request to be able to adjust incentives in real time based upon market conditions and without Commission approval is denied.

IT IS FURTHER ORDERED that the residential PV compliance floor proposed by UNS Electric, Inc. is denied.

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IT IS FURTHER ORDERED that UNS Electric, Inc.'s alternative for charging the average REST surcharge paid by each customer class to customers who receive a REST incentive is approved.

IT IS FURTHER ORDERED that UNS Electric, Inc.'s proposal to no longer report the total system cost for leased systems on the AZ Goes Solar website is approved.

IT IS FURTHER ORDERED that UNS Electric, Inc. count toward REST compliance all qualifying installations within its service territory in 2013 and future years.

IT IS FURTHER ORDERED that the "Track and Record" method for REST rule compliance requirements, as discussed herein, be effective for 2013 and beyond for compliance reporting beginning April 1, 2014.

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

IT IS FURTHER ORDERED that this Decision become effective immediately.

BY THE ORDER OF THE ARIZONA CORPORATION COMMISSION

CHAIRMAN COMMISSIONER

COMMISSIONER COMMISSIONER COMMISSIONER

IN WITNESS WHEREOF, I, ERNEST G. JOHNSON, Executive Director of the Arizona Corporation Commission, have hereunto, set my hand and caused the official seal of this Commission to be affixed at the Capitol, in the City of Phoenix, this _______day of ___________________, 2012.

ERNEST G. JOHNSON
EXECUTIVE DIRECTOR

DISSENT: ____________________________

DISSENT: ____________________________

SMO:RGG:lhm\RM

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