ORIGINAL

OPEN MEETING

MEMORANDUM

TO: THE COMMISSION

FROM: Utilities Division

DATE: October 25, 2011

RE: ARIZONA PUBLIC SERVICE COMPANY – APPROVAL OF ITS 2012 RENEWABLE ENERGY STANDARD IMPLEMENTATION PLAN AND REQUEST FOR RESET OF RENEWABLE ENERGY ADJUSTOR (DOCKET NO. E-01345A-11-0264)

On July 1, 2011, Arizona Public Service Company ("APS") filed its application for approval of its 2012 Implementation Plan ("2012 Plan") pursuant to the Renewable Energy Standard and Tariff ("REST") Rules. On September 21, 2011, APS filed its Supplementary Filing and Notice of Errata. The supplementary filing included corrections and clarifications of the July 1 application.

The APS REST Implementation Plan 2012 to 2016

The APS application includes the 2012 Implementation Plan, Renewable Energy Standard Adjustment Schedules, a Renewable Energy Standard Plan of Administration, a Schools and Government Solar Program Rate Rider Schedule, and an updated Service Schedule 6. In the 2012 Plan, APS offers three different options for Arizona Corporation Commission ("Commission") consideration. The three options include budgets of $129.2 million, $141.2 million, and $151.5 million. The residential RES Surcharge cap would increase by $1.38 in Option 1, by $1.91 in Option 2, and by $2.36 in Option 3.

Table 1: APS' Proposed 2012-2016 Budget Options

	Option 1	**Option 2**	**Option 3**
2012 Budget	$129.2 M	$141.2 M	$151.5 M
2012-2016 Budget	$783.1 M	$810.2 M	$873.8 M
2012 RES Adjustor per kWh	$0.013586	$0.014907	$0.016037
2012 Residential Cap	$5.43	$5.96	$6.41
2012 Non-Res. (under 3 MW) Cap	$201.84	$221.47	$238.27
2012 Non-Res. (3 MW and over) Cap	$605.53	$664.40	$714.81

The 2012 Plan design is to achieve and exceed compliance with the 2012 REST Rules requirements. In 2012, APS must obtain 3.5 percent of its total retail energy sales from renewable energy resources, and 30 percent of that renewable requirement must come from distributed energy ("DE") systems. APS expects to exceed the 2012 RES compliance in all categories.

In addition to the requirements of the REST Rules, APS must also obtain renewable resources to meet the 2009 Settlement Agreement, as required by Commission Decision No. 71448, issued December 30, 2009, in Docket No. E-01345A-08-0172. Per this Decision, APS must obtain new renewable energy resources with annual generation or savings of 1,700,000 megawatt hours by December 31, 2015. This requirement, in effect, doubles the renewable requirements in the REST Rules. These extra requirements will cause significant budget impacts on the 2012 REST budget.

APS contends that once the 2012 REST budget is approved, it must immediately commence procurement activity in order to meet the 2015 Settlement requirements in a cost-effective manner.

APS claims that it will need to procure an additional 300 MW or 502,500 megawatt-hours by December 31, 2015, in order to meet the 2009 Settlement requirements.

The APS plan includes two approaches to meet its 2009 Settlement requirements. First, APS will need additional customer or third-party owned systems. Second, APS will need more utility-owned systems. These utility-owned systems will include new additions to the AZ Sun Program. APS would like to procure 150 MW through each of the two procurement methods in order to meet the 2009 Settlement Agreement requirements.

<u>The 2012-2016 REST Program Options</u>

APS believes that Option 1 is the minimal budget needed to meet the 2012 REST requirements and the 2009 Settlement Agreement obligations. Option 3 reflects the Commission order in the APS 2011 REST Plan docket to have a 2012 residential DE budget of $40 million. Option 2 falls in between the two other options, offering the Commission another choice in lieu of Option 1 or 3.

<u>Option 1</u>:

This option includes 150 MW to be procured via Purchased Power Agreements ("PPAs") in 2012 through 2015.

Option 1 does not include a budget item for additional non-residential DE projects, since APS expects to be in compliance with the 2012 REST requirements without any additional non-residential projects. This option includes only enough funding needed to meet the 2012 residential DE requirement. The residential DE budget portion of Option 1 is $20 million. This would add about 17 MW of new residential capacity in 2012. The total Option 1 budget would be $129.2 million.

<u>Option 2</u>:

Option 2 would include procurement of 125 MW through PPAs in the period of 2012 through 2015. It would continue the non-residential DE Program with a 25 MW expansion between 2012 and 2014. APS would not fund any large scale projects (greater than 200 kW) in this option. APS would allocate $2 million for small, non-residential projects (less than 30 kW) using Up-Front Incentives ("UFI"). A total of $100,000 in 2012 would be reserved for medium-sized (30-200 kW) projects. This would represent a $10 million increase in total lifetime commitment for each year between 2012 and 2014. Option 2 would allocate $30 million to the residential DE program, which would add about 26 MW of new residential capacity in 2012. The total REST budget under Option 2 is $141.2 million.

Option 3:

In Option 3, APS would solicit 100 MW through PPAs in the period 2012 through 2015. This option would expand the non-residential DE program by 50 MW during the period from 2012 to 2014. A budget of $2 million would be budgeted for Up-Front Incentives for small non-residential projects. A budget of $300,000 in 2012 would be used for large and medium-sized projects. This would represent a lifetime commitment of $20 million each year between 2012 and 2014. This would result in 50 MW from medium and large projects. As ordered in Decision No. 72022, Option 3 would include $40 million for residential DE incentives which would procure about 34 MW of capacity. The Option 3 budget would be $151.5 million.

Residential Incentive Funding

APS is proposing residential incentives of $1.30/Watt, which would continue to decrease with market-driven triggers. APS proposes to decrease the incentive for residential geothermal systems from $0.90/kilowatt hour of first-year savings to $0.80/kilowatt hour.

APS proposes to allocate $3 million of the residential incentive funds to the Rapid Reservation Program. APS also proposes to set-aside 15 percent of the residential budget for non-photovoltaic ("PV") technologies. Finally, APS proposes $2.6 million for the Energy Star® Plus Solar Homes Program.

A number of favorable comments were provided on the APS proposal to fund the Energy Star® Plus Solar Homes Program at $2.6 million. They included Shea Homes and Keystone Homes. American Solar recommended that the Solar Homes Program funding be increased to $4 million in 2012 and that the homebuilder incentive be reduced to $1.25 per watt.

On September 15, 2011, in Decision No. 72592, the Commission approved an application by APS to offer $1/watt as the residential UFI incentive. At $1 per watt, APS has been receiving an average of 50 applications per week. At that rate, the residential market in the APS service area appears to be around 2,600 systems per year. APS has indicated that its average system size is 7 kW. If the 50 applications per week holds, the average size system remains 7 kW, and the incentive were to remain at $1 per watt, the total incentive budget for 2,600 systems would be $18,200,000. Under APS Option #1, the $20 million residential budget allocates $2.6 million for the Solar Home Program, $3 million for non-PV incentives, and only $14.4 million for PV incentives. So, the $1/watt incentive would fund only about 2,057 systems per year of demand in the residential market, not 2,600.

Staff believes that the $1/watt incentive for residential UFI incentives has shown that there is a strong market for residential PV systems. In order for APS to maximize the use of its incentive funds and install the optimum amount of solar per budget dollar in 2012, Staff recommends that rather than the $1.30 per watt incentive proposed by APS on July 1, 2011, the incentive should be set at $0.85 per watt on January 1, 2012. Therefore, Staff also recommends against any further funding of the Rapid Reservation Program.

Staff recommends an automatic trigger mechanism to lower PV incentives in order to avoid severe disruptions in the residential marketplace in 2012. Under Staff's proposal for residential DE, the PV UFI would be reduced to $0.70 per watt if 45 percent of incentive funds are reserved on or before June 30, 2012. The second trigger would, if the June 30, 2012 trigger had been reached, reduce the incentive to $0.50 per watt if 70 percent or more of the incentive funding is reserved prior to September 30, 2012. If the June 30, 2012 trigger has not been reached, then the second trigger would reduce the incentive to $0.70 per watt. The third trigger would involve a step-down in the incentive level if 90 percent of incentive funding is reserved on or before November 30, 2011. The incentive would then be reduced to $0.50 per watt if both previous triggers were reached, $0.50 per watt if one previous trigger was reached, and $0.70 per watt if no previous triggers were reached in 2012. The chart below lays out how the overall trigger mechanism would work.

Table 2: Staff's Proposed Incentive Triggers and Levels

Date of Trigger	**Compliance Level to Activate Trigger**	**Incentive Level if Trigger Activated**
On or before June 30, 2011	45%	$0.70 per watt
On or before September 30, 2011	70%	$0.70 per watt if June 30 trigger is not activated. $0.50 per watt if June 30 trigger is activated.
On or before November 30, 2011	90%	$0.70 per watt if no previous 2012 triggers activated. $0.50 per watt if one or both previous 2012 triggers activated

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

Any cancelled project funds added back to the budget would be funded last and allocated at the $0.70 per watt incentive level if the first trigger is reached, or at $0.50 per watt if the second or third trigger is reached. The residential customer will only be able to collect an incentive up to 40 percent of the total system installed cost.

Staff proposes an alternative way to fund and encourage more residential solar demand. First, Staff believes that APS should reduce the new home builder incentive from the current $1.75 per watt to $0.85 per watt. Next, APS should increase the proposed funding of the Energy Star® Plus Solar Home Program from $2.6 million to $3 million.

Non-Residential Incentives

Staff proposes to reduce the non-residential Up-Front Incentive from $1.75/watt to $0.85/watt. Project owners would be able to collect up to 40 percent of the system cost in incentives. This reduction is consistent with other PV incentive reductions that have occurred over the past few years in residential UFI and non-residential production-based incentives ("PBIs"). It is also consistent with Staff's recommendations for other incentive reductions in the APS 2012 REST Plan.

APS' Proposed Elimination/Reduction of Non-Residential PBI and UFI Funds

Several commenters decried APS' proposal to reduce or eliminate non-residential PBI funds over the next five years. They included Vestar, Green Choice Solar, AriSEIA, WalMart, and the Biltmore Bank of Arizona. They argue that to eliminate or reduce the non-residential PBI incentives would restrict non-residential customers from REST funding, while APS would continue to collect monthly REST surcharges in funding the program. Staff agrees with the intervenors that the APS approach would be unfair to all the non-residential customers wanting to install renewables under the REST Program. Staff, in its proposed Options A and B has recommended funding levels that will continue a limited non-residential program in 2012 and beyond. However, Staff's recommendations will significantly reduce the cents per kWh PBI incentive and the cap on the allowable total incentives per project.

Staff believes that APS needs to continue a reasonable level of support for non-residential projects over the next five years. In addition, Staff believes that the PBI incentive levels and the cap on total incentives collected must decrease significantly in 2012. In the residential program, incentives have fallen in the last two years from $3 to $1/watt. Two years ago, residential customers could collect $3 per watt up to half of the system cost. Today at $1 per watt and an average installed system cost of $5 per watt, the residential incentive only provides about 20 percent of the installed system cost. Staff believes that a similar reduction in non-residential incentives is due and that without such a reduction, the cost of non-residential PBIs will, over time, drive up ratepayer REST monthly charges to unacceptable levels.

Staff notes that public comments on the APS Plan said it would "eliminate free market competition" and "cripple" the PBI program. Staff believes that the REST Program needs more robust free market competition. Staff believes that its non-residential PBI incentive proposal will signal a new wave of encouragement for lower-cost non-residential installations.

In the current APS Distributed Energy Administration Plan ("DEAP"), the PBI incentive caps for 10, 15, and 20-year plans are 15.4, 14.3, and 13.8 cents per kWh, respectively, and the customer may collect up to 50 percent of the installed system cost in incentives. To be consistent with incentive cap reductions in the residential program, Staff recommends that the non-residential PBI incentive level limits be reduced to $0.084 per kWh for 10-year contracts, $0.082 per kWh for 15-year contracts, $0.08 per kWh for 20-year contracts and that customers shall only be allowed to collect up to 40 percent of the total system installed cost of projects approved in 2012.

Staff notes that merely dropping the incentive level from $0.138 per kWh to $0.08 per kWh is insufficient for the utility to reduce the total lifetime incentive for a given project. Having a lower incentive of 8 cents will only mean that it will take the customer a few more years to collect the remainder of its allowable 40 percent of installed costs. In order to truly reduce the incentive costs to APS, the cap on lifetime incentives for non-residential projects must be reduced to 40 percent of the total system installed cost.

DE Program Enhancements

APS is proposing changes to its incentive program administration processes to handle the issuance of Internal Revenue Service Form 1099 to residential incentive recipients. APS proposes a new monitoring program to install production meters for small residential and non-residential PV systems that receive Up-Front Incentives. The production meters would be in addition to the bi-directional meter used for billing the customer. The meter will validate the PV production at the customer level. APS hopes to install 7,200 meters in 2012 at a budget cost of $600,000.

Two comments were received on the metering proposal. First, the Solar Alliance asked APS to justify the meter installation proposal and asked who would fund the installation of the meters. Solar City expressed concern about APS installing meters retroactively on existing systems. Staff has reviewed the APS proposal and recommends that it be deleted from the APS 2012 plan. In a year when APS is asking for increases from $30 million to over $50 million, Staff believes every dollar in the budget must be justified. Staff believes that the $600,000 in meter installation cost would be better spent on non-residential system incentives. However, if APS truly believes that this metering is essential, Staff recommends two possible options. First APS could fund the meters out of non-RES funding sources. Second, APS could develop a program for 2013 using a small random sampling of new residential PV systems with new meters. If, by the end of 2013, APS finds that the random sample shows a significant number of new systems are under-performing, APS could ask the Commission to expand the metering program in 2014.

As suggested by solar industry representatives, and required by Decision No. 72022, the APS 2012 REST Plan includes a required security deposit for all non-residential PBI program applicants. The Applicant will be required to submit a reservation deposit to APS equal to five percent of the total lifetime PBI commitment request for the reserved project. If the full reservation deposit is not received by APS within seven business days, the conditional reservation will be cancelled and the reservation funds will be awarded to the next ranked project. Once a project is successfully interconnected, with all required paperwork submitted to APS, and has passed inspection, the reservation deposit will be refunded to the applicant.

Several parties commented about the APS-proposed security deposit. Green Choice Solar supports the APS proposal "without any changes." Solar City complained that the requirements "are too stringent and that the proposal ties up capital." The Arizona Solar Energy Industries Association ("AriSEIA") objected to the APS Security Deposit proposal, but provided an alternative proposal:

1. An initial deposit is required for performance based incentive projects in the amount of $3,000 for systems 200 kW AC and under, $6,000 for systems greater than 200 kW AC and less than 500 kW AC, and $10,000 for systems over 500 kW AC to the 2 MW limit. This deposit is due 30 days after APS notifies the customer of the incentive award. APS will continue to make new awards to replace forfeited awards until the category's next respective auction, and then roll unused funding into the next period.

2. A second deposit of 2 percent of the lifetime incentive funding requested shall be required. This deposit is due 120 days after notification of award. In lieu of a cash payment, customers may submit bonds or letters of credit for the corresponding amounts. APS will continue to make new awards from the most recent auction within funding category to replace forfeited awards until two weeks before the category's next respective auction, and then roll unused funding into the next period.

3. Deposits may be submitted on behalf of APS customers by installers, dealers or other parties.

4. The current progress milestone requirement at 90 days shall be extended to 120 days, coinciding with the second deposit due date and 120 day milestone.

Staff has reviewed the AriSEIA proposal and recommends that it replace the APS security deposit proposal. Staff is aware that this approach may not fully solve the "phantom project" problem, so Staff recommends that the Commission order APS to evaluate the AriSEIA security deposit approach during 2012 and be prepared to make adjustments in the 2013 REST Plan, if it fails to solve the phantom project problem.

APS has, at the suggestion of the solar industry, added a requirement that all applications for the residential UFI program must include submission of a complete, executed contract between the customer and solar installer/developer, including the technical specifications for the project.

APS proposed to update its Distributed Energy Administration Plan ("DEAP"). Included will be additional requirements for leased systems to provide documentation naming the actual owner of the residential DE system. APS also proposes to prorate incentives for solar water heaters that are installed at less than optimal tilt and orientation, due to reduced energy savings for those sub-optimal installations. Staff agrees with all of the proposed changes to the DEAP and recommends Commission approval.

Schools and Government Program

APS is proposing to narrow the criteria ranges on the Project Ranking Matrix in order to better evaluate the economic status of schools. All other requirements remain unchanged.

APS claims that the strong market response for third-party incentives in the 2011 Schools and Government Program shows that a high incentive level is no longer needed for economically challenged districts. APS wants to lower the current approved PBI rate for 2012 of $0.145 per kilowatt-hour ("kWh") for 15-year contracts to $0.123/kWh and the current approved PBI rate of $0.132/kWh for 20-year contracts to $0.112/kWh. APS claims that reduction of the incentive will allow it to fund more projects during a nomination program.

The APS Plan allocates $65.8 million of the lifetime commitments to the third-party PBI projects and expands the Up-Front Incentives budget for solar daylighting installations by $562,500. APS would update the School and Government Solar Program Rider Rate Schedule to reflect the changes.

APS has seen increased customer interest in the Schools and Government Program, particularly from economically-challenged school districts. In the 2012 APS Plan, APS is asking for authorization to expand its deployment of utility-owned systems by 25 MW for economically challenged schools as well as government facilities in 2012 and 2013. This would be in addition to the 2011 Schools and Government projects approved by the Commission in Decision No. 72022 and amended by Decision No. 71274.

The only change would be the elimination of the restriction that limits the APS-owned option to only rural schools. APS states that this change will offer all economically-challenged schools another option to deploy solar resources. The installation, operation, and maintenance of the systems would be managed by third-party installers/developers. The renewable energy from the utility-owned systems would not be counted toward meeting the RES distributed energy requirements. The renewable energy would be credited toward the overall RES requirement of APS. This expansion of utility-owned solar systems would increase the budget by $2.9 million.

Numerous parties submitted comments on the APS Schools and Government Program. Green Choice Solar claims that the expansion of the Schools and Government Program comes at the expense of the non-residential PBI program. The Arizona Solar Energy Industries Association insists that the third-party ownership approach is the best method and that the percentage of utility ownership in the Schools and Government Program should be reduced to 0 percent. Solar City says that any expansion in the program should be equally divided between third-party owned systems and utility-owned systems. Solar City also expressed concern about APS' proposed reductions of the incentives in the Schools and Government Program. The Solar Alliance developed a new proposal for the REST Plan including recommended changes to the Schools and Government Program. The Solar Alliance opposes the APS-proposed reduction in third-party incentives for schools.

Staff agrees with some of the stakeholders that APS' proposed reduction of PBI funding for the 2012 REST Plan could reduce competition in the renewable marketplace. Staff believes that increased competition in the Schools and Government Program can help to encourage a more competitive non-residential marketplace in Arizona. However, offering fixed third-party incentives does not allow for robust price competition.

In response to a data request from Staff, APS provided data to Staff about the demand for Schools and Government Program project funding. During the first three funding cycles of 2011, APS received 44 applications requesting funding for 11.7 MW of PV installations. Of the 44 applications received, APS was able to fund 16 projects by reserving $10.89 million in incentives. There were 28 school projects, totaling 8.3 MW of capacity that APS was unable to fund. The government part of the Schools and Government Program received 27 applications, but APS only had funding for 6 projects. These six projects will provide 1.22 MW of capacity. The other 21 applications which were not funded totaled 5.01 MW of capacity.

These recent numbers convince Staff that setting a fixed PBI incentive number for the Schools and Government Program is a mistake. The 28 unfunded schools projects and the 21 unfunded government projects are proof that there is a significant demand for Schools and Government funding and that schools and government projects should compete on a least-cost basis, similar to the very successful competition in the APS third-party non-residential PBI program. The competition in the regular PBI program has been so successful that APS has reserved enough capacity to meet its non-residential REST requirements for the next five years. Staff believes that similar project competition in the Schools and Government program can significantly reduce the delivered cost per kWh, fund more projects and install more MW of capacity per dollar of budget allocation.

Staff, therefore, recommends that third-party incentives for the Schools and Government Program be capped at $0.12 per kilowatt hour for 15-year contracts and $0.10 per kilowatt hour for 20-year contracts. Total incentives per project would be capped at 40 percent of total system installed cost. APS should change its project selection criteria to select the lowest-cost incentive projects, similar to the existing non-residential PBI program that has worked so well over the last few years.

In regard to the APS proposal to allow expansion of utility-owned Schools and Government projects by 25 MW, Staff recommends that APS be allowed to expand utility-owned projects by an additional 15 MW that would focus on economically challenged schools in all areas of APS' service territory. Further, Staff recommends approval of an additional 10 MW of third-party projects, but only if they are allocated by a least-cost method and subject to Staff's proposed incentive caps. Total incentives per third party project would be capped at 40 percent of the total system installed cost.

In the Schools and Government Program, APS has proposed reductions for most of the solar charges and increases for a few solar charges in the APS Rate Rider Schedule SGSP. This revised Rate Rider Schedule would fund projects at the most economically challenged schools in all areas of the APS service territory. Staff recommends approval of these changes.

Marketing and Advertising Costs

APS has typically included a marketing budget in its annual REST plan filings. For the proposed 2012 REST plan budget, APS has proposed $3 million in funding for customer programs, including marketing and advertising. This funding is included on Lines 34 and 35 of REVISED Exhibit 2A of the APS 2012 REST Plan. These are the line items entitled "Renewable Energy Incentive Program Non-Incentive Costs" on Line 34 and "Advertising" on Line 35. In the "non-incentive costs" line, a number of the programs are continuations of programs approved by the Commission in 2008, 2009, and 2010. A few programs have three year contracts with third-party vendors. For this reason, Staff only recommends a reduction of $300,000 in the "non-incentive cost" budget line. Staff recommends a $500,000 reduction in advertising costs in the budget.

Staff believes that with the significant growth in the renewable energy industry in Arizona in recent years, there are now many venues for publicizing renewable energy technologies and programs, and the renewable energy industry should bear the primary responsibility for marketing renewable energy in Arizona. Therefore, the need for continued funding of marketing and advertising by APS' ratepayers has declined significantly. Thus, Staff is recommending approval of a $800,000 reduction in marketing and advertising costs as described herein. Staff further recommends that in future REST plans, the burden of proof will be borne by APS to justify the use of ratepayer funds to pay for marketing and advertising if APS proposes to use of ratepayer funds for marketing and advertising in future REST plans.

Integrated Pilot Program

As ordered by the Commission in Decision No. 72060, APS has developed a Pilot Program that coordinates the integration of Smart Grid technology with DE, energy efficiency ("EE"), and demand response ("DR") technologies. The Pilot would involve customers served by the APS Pioneer Substation located near I-17 and Carefree Highway in North Phoenix. Up to 100 Pilot customers would be offered incentives for installing grid-tied PV systems with an APS-owned Smart inverter and a suite of "Smart Home" technologies. APS would like to collect $1.5 million associated with the DE component of the offering. This would include system integration costs, project management, incentives for PV systems, and the revenue requirement associated with the APS-owned inverters through the RES adjustor.

A few comments addressed the funding of the Integrated Pilot Program, questioning the use of REST funding for such an application. Staff has reviewed the APS request and believes that some funding for the Integrated Pilot Program is appropriate and that, since APS was ordered by the Commission to develop such a project, the funding should be approved in the 2012 REST Plan, but at a level of $700,000 rather than the $1.5 million originally requested.

Utility-Owned Projects

APS contends that the acquisition of solar resources via utility ownership is consistent with APS resource planning efforts. APS claims that the "cost to customers as a whole is significantly less for utility-owned projects over the life of a renewable energy asset, as compared with the cost of purchased power."

APS mentions that 97 percent of its current 227 MW of renewable generation capacity is owned and financed by third-party developers. If the additions proposed in the 2012 plan are approved, APS would have by year-end 2015, a portfolio of 886 MW of third-party owned and financed capacity (totaling 78 percent of total capacity) and 256 MW of APS-owned resources (totaling 22 percent of total capacity).

APS is requesting Commission approval for cost recovery of the revenue requirements associated with the renewable ownership programs (to include property taxes, depreciation expenses, operating and maintenance expenses, and return on debt and equity using the pre-tax weighted average cost of capital approved in the Company's most recent general rate case). This recovery would be through the RES adjustor until such time as the costs may be reflected in base rates. APS mentions that this recovery method is consistent with Section 15.7 of the 2009 Settlement Agreement approved in Decision No. 71448 and with the Commission decisions related to the Community Power Project (Decision No. 71646), the AzSun Program (Decision Nos. 71459 and 71502), and the Schools and Government Program (Decision Nos. 72022 and 72174).

In its September 21, 2011, Supplementary Filing & Notice of Errata, APS corrects the figures shown on Page 13, Lines 11-12 of the original APS application. In that correction, APS states that the total renewable capacity under proposed APS Option 2 is 756 MW, of which 79 percent would be third-party owned and financed and 21 percent would be APS-owned.

The issue of how much renewable generation should be utility-owned and how much should be owned by third parties is the most controversial item in the REST Plan. Staff believes that the Commission should be aware of two important aspects of the policy issue.

First, over the past few months there has been a healthy discussion between the Solar Alliance and APS over which approach, utility-owned or third-party owned, is the best deal for ratepayers. This issue was discussed at the APS REST stakeholder meeting on September 30, 2011. At that meeting, it appeared that APS and the Solar Alliance agreed that the cost to non-participating ratepayers was about comparable, no matter who owned the system. Basically, this means that neither approach is vastly superior to the other in terms of impacts on non-participating customers. Assuming that is correct, Staff believes that the Commission should consider the second aspect of the issue.

The second aspect is related to how the APS customers will pay for the renewable generation required by the REST Rules and the 2009 APS Settlement Agreement. Currently, renewable generating projects owned by APS, such as the AzSun Projects, have their revenue requirements funded through the APS adjustor until the generation is included in the rate base as a result of a rate case. This has the short-term effect of increasing the REST adjustor charge for a while, while the revenue requirements are being collected through the REST adjustor and then the adjustor drops in the year that the assets are moved into rate base.

The best description of this effect is shown on Line 3 in Revised Exhibit 2A of the APS September 21, 2011, Supplemental Filing and Notice of Errata. Line 3 is for Purchases and Generation. In 2012, that line shows $67.5 million, but in 2013, the amount in Line 3 drops to $46 million. This shows the impact of the first phase of AzSun projects being moved into rate base. In 2014, Line 3 increases (temporarily) to $104.8 million and in 2015, it drops again to $84.3 million when the next set of utility-owned renewable generators are moved into rate base.

If the Commission were to agree to the proposals to block APS from new ownership of renewable generators and, instead, require that the funding go to third-party PBIs and PPAs, the resulting PBI and PPA funding commitments would remain in the REST budget for up to 20 years. Each year, that commitment would be joined by a new set of 10 to 20-year PBI/PPA commitments. Unlike utility-owned assets which would be removed from the REST adjustor every few years as they are added to rate base, the PPA/PBI commitments will never be removed from the adjustor, causing the REST budget to continue increasing every year.

The Expanded AzSun Program

The 2012 expansion of the AzSun Program continues the program that the Commission first approved for the initial 100 MW phase of the AzSun program in 2010. APS is requesting authorization to develop another 100 MW of solar generation through the AzSun Program. APS expects that about 18 MW will start operating in 2013, approximately 32 MW will start up in 2014, and approximately 50 MW will start up in 2015.

Staff recommends Commission approval for APS to build an additional 100 MW of solar generation through the AzSun Program. The recovery mechanism would be the same as that for the first 100 MW phase.

Funding of the Chino Valley Project

APS is also requesting Commission authorization for recovery of $5.3 million in revenue requirements for the 19 MW of the Chino Valley Project, which was part of the second 50 MW of AzSun projects approved by the Commission in Decision No. 71502. In that Decision, the Commission assured cost recovery for the entire 100 MW of the first phase of AzSun projects. However, the Commission deferred determining the recovery mechanism for the second 50 MW to the rate case that APS filed on June 1, 2011.

APS would like an earlier decision on the cost recovery mechanism for the Chino Valley Project. APS says that this earlier decision would let the construction start in January 2012 and the project would be operational by the end of 2012. APS projects that $20 million of labor and materials will be sourced from the Chino Valley area, and the new system will provide an increase in the local tax base.

Staff recommends that the Commission approve APS' request to recover the revenue requirements of the Chino Valley Project through the RES adjustor. APS had originally requested $5.3 in recovery of revenue requirements. Staff recommends that the system start-up be delayed until September 30, 2012. This would reduce the revenue requirement in 2012 by $1.7 million, dropping the revenue requirement for this project from $5.3 million to $3.6 million in 2012.

Other Key Programs

Schedule 6: Interconnection Study Service

In Decision No. 72022, the Commission approved Service Schedule 6. Service Schedule 6 streamlines the interconnection process for non-DE projects on the APS distribution system. It provides APS an opportunity to assess engineering study fees and appropriate application fees.

APS proposes to change Service Schedule 6 to include non-FERC projects that interconnect at or above the 69 kV level. This change will accommodate developers wishing to accomplish transmission interconnection under a non-FERC process. The applicant would pay the actual cost for each of the three levels of non-FERC transmission studies. The applicants would provide a deposit prior to the start of the studies. There would be a true-up once the studies are completed.

Staff recommends approval of the changes to Service Schedule 6.

Research, Commercialization, and Integration

A total of $1.8 million is allocated for Research, Commercialization, and Integration in the APS 2012 Plan. Studies include the high penetration of distributed resources and impacts on the distribution system, energy storage, and solar cost integration studies. Also included are studies about combined solar, plug-in hybrid electric vehicles and solar water heating analysis.

Staff recommends that the Commission reduce the Research, Commercialization, and Integration budget by $500,000 from $1.8 million to $1.3 million.

Customer Outreach, Marketing, and Partnership Development

APS proposed a program of customer outreach, marketing and partnership development to meet the RES requirements. Included is a continuation of the Qualified Solar Installer and Trained Solar Installer Program. APS wants to further expand the APS Energy Star® and Solar Homes Program. APS would continue with its website, aps.com and the ArizonaGoesSolar.org website. APS is proposing the discontinuation of its residential financial lending incentive, due to lack of participation by lending institutions.

Staff recommends approval of these changes.

Customer/Community-Sited Utility-Owned Resources

In addition to the APS request for approval of 25 MW of utility-owned schools projects in 2012 and 2013, APS has requested approval for 25 MW of utility-owned customer and/or community-sited community resources in 2014 and 2015. APS plans to provide more details about this new community-sited effort when it files the APS 2013 RES Implementation Plan.

Staff has reviewed the APS request for 25 MW of new utility-owned and operated community-sited projects and recommends approval.

<u>Staff's Concerns About REST Plan Formats</u>

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

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

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

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

New Proposals by Stakeholders

In the past month, two organizations have submitted alternative proposals to the three APS options. They are the Solar Alliance and Green Choice Solar.

The Solar Alliance ("SA") proposal would deploy 300 MW of renewable capacity in 2012 and 2013. The SA proposal would reduce the APS-owned portion of the Schools and Government Program and shift funds to third party owned projects. The proposal would also reduce the small commercial UFI funding and medium and large non-residential PBI funding from the APS proposal. Similarly, the SA proposal would reduce the residential DE incentives proposed by APS in APS Option 3. SA contends that its proposal can be accomplished with a residential surcharge cap of $5.92.

The Vote Solar Initiative provided comments in support of the Solar Alliance Proposal. Vote Solar believes the SA proposal is an improvement on APS' three options and that the SA proposal "provides greater near term market certainty" than the APS options.

Staff has reviewed the SA proposal. Staff notes that, unlike the APS proposed three options which show the five-year budget impact of the three options, the SA proposal only shows a proposal for shifting MWs of capacity from utility ownership to third-party ownership.

Staff believes that the Solar Alliance has not provided a convincing argument of why the Commission should select the SA proposal. It is tempting to make the comparison only for 2012, but that provides Staff and the Commission with little data upon which to make a decision. Most non-residential projects approved in 2012 will not reach start-up until 2013, when a series of incentive payments will commence for up to 20 years. So, when considering PPAs and PBIs approved in 2012, the full REST budget impact will not be seen until 2014 when APS will likely see its first full year of incentive payments for the new projects.

The Commission should consider the phenomenon that Staff calls the "PBI Paradox." In the past, non-residential PBI projects have looked like a "great deal" because, even at an incentive of 10-15 cents per kWh, the projects appear to be a "bargain." If the incentive payments are low, say $100,000 or $200,000 per project per year, the near-term budget impact is minimal. However, each year, new contracts are added to the APS long-term payment requirements. Each new contract permanently increases the annual REST budget. Unlike Up-Front Incentives, which pay once for a lifetime of renewable kWh and pay nothing in future years, the PBI payments are a commitment for the life of the contract.

Green Choice Solar introduced four new proposals: Options A, B, C, and D. Unlike the Solar Alliance proposal, which shifts MWs from APS and from non-residential PBIs to third-party PPAs, Green Choice Solar's proposals shift MWs from APS ownership or third-party PPAs to non-residential PBIs.

Staff has reviewed the Green Choice Solar proposals. Staff believes that the Green Choice Solar proposals have a problem similar to that of the Solar Alliance. Green Choice

Solar's proposals merely shift around the MWs from one ownership option to another. Similar to the Solar Alliance, Green Choice Solar failed to demonstrate the multi-year budget impact of its proposed proposals. Without a budget impact comparison of Green Choice Solar's proposals to the APS and Solar Alliance proposals, it is impossible to determine which proposal offers the ratepayers the best long-term deal. Staff finds no convincing evidence that the proposals by the Solar Alliance and Green Choice Solar are better for ratepayers than the APS approach.

Staff's Proposed Budget Changes and Recommended Options

The following are Staff's proposed changes to the APS REST Plan budget proposal, as outlined in APS REVISED Exhibit 2A, filed on September 21, 2011:

Line 3 (Purchases and Generation): By delaying the start-up of the Chino Valley project until September 30, 2012, the Revenue Requirements for that project should be reduced by $1.7 million from $5.3 million to $3.6 million.

Line 22 (Schools and Government): By delaying the in-service dates for certain projects, the budget for 2012 should be reduced by $1.7 million.

Line 23 (APS Customer Sited Community Solar): APS should reduce the funding in this program by $1.5 million. This reduction reflects a mid-year deployment.

Line 24 (EE/RE Integrated Pilot): APS should reduce the funding in this program by $800,000. This reduction reflects the new, lower incentive levels that will be available in 2012.

Line 25 (Energy Assistance for Renewable Neighborhoods): APS should reduce the funding in this program by $300,000 to reflect lower incentive levels.

Line 32 (Implementation): APS should reduce expenses by $300,000 from $5 million to $4.7 million. This reflects the reduced need for meters in 2012 due to greater than expected installs in 2011.

Line 34 (Renewable Energy Incentive Program Non-Incentive Costs): APS should reduce funding by $300,000 from $2.3 million to $2.0 million.

Line 35 (Advertising): APS should reduce its Advertising by $500,000 from $700,000 to $200,000.

Line 40 (Research, Commercialization, and Integration): APS should reduce funding in this program by $500,000 from $1.8 million to $1.3 million.

Line 45 (Residential and Commercial DE): Changes in this line will be detailed in Staff's Option A and Option B proposals.

Staff has reviewed the APS 2012 REST Plan application and the comments of stakeholders and interested parties. Staff has developed for Commission consideration two proposed options that are similar to APS Options 1 and 3, but have been modified in a number of places. Staff's two options are named Staff Option A and Staff Option B. The budget impacts of these two options are compared to APS' Options 1-3 in Table 10.

Staff Option A: Option A is similar to Option 3 in the APS 2012 REST Plan. Staff believes that Option A allows Commissioners to permit APS to operate programs that will allow it to meet the REST Rules requirements, the 2009 Settlement Agreement requirements for renewable generation and the Schools and Government Program as well as meeting the spirit of the Commission order in Decision No. 72022, requiring the funding for the residential solar program to be maintained at $40 million in 2012.

Staff notes that the residential PV marketplace has changed significantly since December 2010. The greatly reduced cost of PV panels and the significant reduction in PV system installed costs has convinced Staff that a lower PV UFI is appropriate for residential customers in 2012. In addition, Staff notes that since June 2011, when the $1/watt Rapid Reservation Program began to attract a significant number of customers, APS has averaged approximately 50 applications per week, which indicates that the residential demand for PV systems is approximately 2,600 systems per year at $1/watt.

Staff recommends that a portion of the $40 million originally planned for residential systems be re-allocated to non-residential UFI incentives and PBI incentives. Staff agrees with some of the solar industry's comments that the APS plan for non-residential PBI systems as proposed in APS Options 1, 2, and 3 could have a damaging impact on the non-residential solar industry in Arizona.

For Staff Option A, Staff proposes to reduce the $40 million residential set-a-side to $30 million, including both residential and non-residential applications. This would include $25 million for residential incentives and programs and $5 million for non-residential programs. The Option A incentive package would include:

Table 3: DE Program Proposal for Staff's Option A Compared to APS Option 3

Staff's Option A		**APS Option 3**
DE Program Element	Amount	Amount
Residential PV Incentives	$ 18,000,000	$ 31,400,000
Non-PV Technology Incentives	$ 3,750,000	$ 6,000,000
Energy Star® Plus Solar Homes	$ 3,250,000	$ 2,600,000
Small, Non-residential UFIs	$ 4,400,000	$ 2,000,000
Medium-size, Non-residential PBIs	$ 300,000	$ 150,000
Large size, Non-residential PBIs	$ 300,000	$ 150,000
Total	$ 30,000,000	$ 42,300,000

For the non-residential PBI programs, APS would commit to a lifetime commitment for medium-sized, non-residential projects of $20 million in each year between 2012 and 2014. APS would commit to a similar $20 million per year of lifetime commitment in each year between 2012 and 2014 for large-sized, non-residential projects.

The total 2012 budget proposed by Staff in Option A is $131.7 million. At that budget level, APS calculates that it would need a surcharge of $0.013861 per kWh with a residential cap of $5.54 per month, a small non-residential cap of $205.94 per month, and a large non-residential cap of $617.83 per month.

Staff Option B: Option B is similar to Option 1 in the APS 2012 REST Plan. This option allows the Commission an approach that provides only sufficient funding to meet the 2012 REST DE requirements and some additional funding toward meeting the Schools and Government Program and 2009 Settlement requirements ordered by the Commission.

In the original APS REST Plan document, APS proposed three optional DE incentive budgets: $20 million, $29.9 million, and $40 million. The breakdown of those proposed options is shown below:

Table 4: APS Proposed 2012 Residential Incentive Budget Options (in $Millions)

	Option 1	**Option 2**	**Option 3**
PV Incentive Budget*	14.4	22.8	31.4
Non-PV Technology Incentive Budget**	3.0	4.5	6.0
Energy Star® Plus Solar Homes	2.6	2.6	2.6
Total Incentive Budget by Option	20.0	29.9	40.1

* Includes $3.0 million in each of the three Options for $1/watt incentives
** Represents 15% of total residential incentive budget

On September 21, 2011, APS submitted its Supplementary Filing and Notice of Errata. In that filing, APS revised its estimate of funding needed to meet the 2012 REST residential requirement. Due to Commission Decision No. 72592, which reduced the residential incentive to $1/watt, APS calculated that it would take $5.2 million less in 2012 to meet the 2012 residential REST requirement than was originally projected last July.

For Staff Option B, Staff proposes to reduce the residential incentive portion to $17 million and add in a non-residential package of incentives of $2 million. The total DE incentive package under Staff Option B would be $19 million, a reduction of $1 million from APS Option 1. The Staff Option B incentive package includes:

Table 5: DE Program Proposal for Staff's Option B Compared to APS Option 1

Staff's Option B		APS Option 1
DE Program Element	Amount	Amount
Residential PV Incentives	$ 11,500,000	$ 14,400,000
Non-PV Technology Incentives	$ 2,500,000	$ 3,000,000
Energy Star® Plus Solar Homes	$ 3,000,000	$ 2,600,000
Small, Non-residential UFIs	$ 1,800,000	$ 0
Medium-size, Non-residential PBIs	$ 100,000	$ 0
Large size, Non-residential PBIs	$ 100,000	$ 0
Total	$ 19,000,000	$ 20,000,000

For the non-residential PBI program, APS would commit a total lifetime commitment for medium-sized, non-residential projects of $10 million in each year between 2012 and 2014. The $100,000 large system PBI allocation would represent a total lifetime commitment of $10 million in each year between 2012 and 2014 for the large non-residential systems.

The total 2012 budget proposed by Staff in Option B is $120.7 million. At that budget level, APS calculates that it would need a surcharge of $0.012639 per kWh with a residential cap of $5.06 per month, a small non-residential cap of $187.77 per month, and a large non-residential cap of $563.32 per month.

A Comparison of Staff's Proposals and APS' Proposals

In order to determine the best approach for APS to follow, a direct comparison of the APS and Staff proposals is appropriate. The first comparison is the monthly customer impact in terms of surcharges and monthly caps.

Table 6 below shows the proposed surcharge per kWh for each APS and Staff option as well as the proposed caps under each option, in comparison to what is currently in effect for 2011.

Table 6: Comparison of Surcharges and Caps

	2011 Approved	**2012 APS Option 1***	**2012 APS Option 2**	**2012 APS Option 3**	**2012 Staff Option A**	**2012 Staff Option B**
REST Charge (per kWh)	$0.0101320	$0.013013	$0.014907	$0.016037	$0.013861	$0.012639
Class Caps						
Residential	$ 4.05	$ 5.21	$ 5.96	$ 6.41	$ 5.54	$ 5.06
Small Commercial	$150.53	$193.33	$221.47	$238.27	$205.94	$187.77
Large Commercial (3 MW+)	$457.60	$579.99	$664.40	$714.81	$617.83	$563.32

***NOTE**: As modified in the APS September 21, 2011, Supplementary Filing.

For comparison purposes, Table 7 below shows the projected MWH by customer class for 2012.

Table 7: Projected MWH Sales by Customer Class for 2012

Customer Class	2012 Projected Sales (MWH)	
Residential	13,320,427	47%
Small Commercial	11,717,866	42%
Large Commercial	3,148,821	11%
	28,187,114	100%

Table 8 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.

Table 8: Contribution, Per kWh Consumed by Customer Class

Contribution by Customer Class ($/kWh)	2011 RES Plan	2012 APS Option 1	2012 APS Option 2	2012 APS Option 3	2012 Staff Option A $131.7 M	2012 Staff Option B $120.7 M
Residential	$0.00351	$0.00458	$0.00522	$0.00560	$0.00486	$0.00446
Small Commercial	$0.00413	$0.00526	$0.00600	$0.00644	$0.00559	$0.00512
Large Commercial	$0.00045	$0.00050	$0.00055	$0.00057	$0.00052	$0.00050

The cost recovery by customer class for the approved 2011 REST Plan and estimates for the APS and Staff options for the 2012 REST Plan are shown in Table 9.

Table 9: Cost Recovery/Contribution by Customer Class for Approved 2011 Plan and Proposed 2012 Plans

Contribution by Customer Class ($/kWh)	2011 RES Plan	2012 APS Option 1	2012 APS Option 2	2012 APS Option 3	2012 Staff Option A $131.7 M	2012 Staff Option B $120.7 M
Residential	$46,799,257	$61,055,346	$69,490,699	$74,553,978	$64,801,453	$59,426,665
	49%	49%	49%	49%	49%	49%
Small Commercial	$48,447,436	$61,646,352	$70,293,906	$74,459,603	$65,542,641	$59,987,327
	50%	50%	50%	50%	50%	50%
Large Commercial	$1,153,307	$1,298,302	$1,415,395	$1,486,419	$1,355,906	$1,296,008
	1%	1%	1%	1%	1%	1%
Total	$96,400,000	$124,000,000	$141,200,000	$151,500,000	$131,700,000	$120,700,000

Table 10: Comparison of APS' and Staff's Budget Proposals

Line No.	($ MILLIONS)	APS	STAFF A	STAFF B
1	Renewable Generation			
2	***Renewable Generation Contracts and O&M***			
3	Purchases and Generation	$ 67.5	$ 65.8	$ 65.8
4	Administration	1.9	1.9	1.9
5	Implementation	1.3	1.3	1.3
6	***Total RG Contracts and O&M***	***$ 70.7***	***$ 69.0***	***$ 69.0***
7	***Offsets***			
8	Estimated Green Choice Revenue Credit	$ (0.6)	$ (0.6)	$ (0.6)
9				
10	***Total Renewable Generation (line 6 + line 8)***	***$ 70.1***	***$ 68.4***	***$ 68.4***
11				
12	Customer Sited Distributed Energy			
13	***Existing Contracts and Commitments***			
14	DE RFP	$ 4.9	$ 4.9	$ 4.9
15	Innovative Technologies	0.2	0.2	0.2
16	PBIs (Existing)	7.9	7.9	7.9
17	Flagstaff CPP	0.4	0.4	0.4
18	Wholesale DE	0.2	0.2	0.2
19	***Total Existing Contracts and Commitments***	***$ 13.6***	***$ 13.6***	***$ 13.6***
20				
21	***New Incentives and Commitments***			
22	Schools and Government Program	6.8	5.1	5.1
23	Customer Sited Community Solar	2.9	1.5	1.5
24	EE/RE Integrated Pilot	1.5	.7	.7
25	EARN	0.5	0.3	0.3
26	***Total New Incentives and Commitments***	***$ 11.7***	***$ 7.6***	***$ 7.6***
27				
28	***Total Incentives & Commitments (line 19 + line 26)***	***$ 25.3***	***$ 21.2***	***$ 21.2***
29				
30	***Non-Incentive DE Costs***			
31	Administration	$ 2.2	$ 2.1	$ 2.1
32	Implementation	5.0	4.7	4.7
33	Information Technology	1.8	1.8	1.8
34	Renewable Energy Non-Incentive Costs	2.3	2.0	2.0
35	Advertising	0.7	0.2	0.2
36	***Total Non-Incentive DE Costs***	$ 12.0	$ 10.8	$ 10.8
37				
38	***Total Customer Sited DE (line 28 + line 36)***	***$ 37.3***	***$ 32.0***	***$ 32.0***
39				
40	*Research, Commercialization & Integration*	1.8	1.3	1.3
41				
42	**Base RES Budget (line 10 + line 38 + line 40)**	**$ 109.2**	**$ 101.7**	**$ 101.7**
43				
44	***Total RES Budget***			
45	Option 1 additions	$ 14.8	----	$ 19.0
46	**Base RES plus Option 1 total**	**$ 124.0**	----	**$ 120.7**
47	Option 2 additions	$ 32.0	----	----
48	**Base RES plus Option 2 total**	**$ 141.2**	----	----
49	Option 3 additions	$ 42.3	$ 30.0	----
50	**Base RES plus Option 3 total**	**$ 151.5**	**$ 131.7**	----

Staff Recommendations

1. Staff recommends that the Commission approve the Staff proposed Option A, reflecting a REST charge of $0.013861 per kWh, with monthly caps of $205.94 for non-residential customers, and $617.83 for non-residential customers with demands of 3 MW or greater. This includes a total budget of $131,700,000.

2. Staff recommends that the residential PV Up-Front Incentive be set at $0.85 per watt on January 1, 2012.

3. Staff recommends approval of the trigger mechanisms for reducing Photovoltaic up-front incentives as proposed by Staff.

4. Staff recommends that residential customers only be allowed to collect incentives up to 40 percent of the total system installed cost.

5. Staff recommends that the residential geothermal system incentive be set at $0.80 per kilowatt hour.

6. Staff recommends that the DE Program Element budgets be set at levels in Staff proposed Option A.

7. Staff recommends that the new home building incentive be set at $0.85 per watt.

8. Staff recommends that the non-residential Up-Front Incentive be set at $0.85/watt.

9. Staff recommends that the upper limit for non-residential Production Based Incentives be set at $0.084 per kWh for 10-year contracts, $0.082 per kWh for 15-year contracts, $0.08 per kWh for 20-year contracts and that customers shall only be allowed to collect up to 40 percent of the total system installed cost.

10. Staff recommends that the Rapid Reservation Program be eliminated since it is no longer needed.

11. Staff recommends that the APS proposal to install $600,000 in new meters be deleted from the REST Plan.

12. Staff recommends that the Commission order the adoption by APS of the AriSEIA Security Deposit Proposal in lieu of the APS Security Deposit Proposal.

13. Staff recommends that the Commission order APS to evaluate the AriSEIA security deposit approach in 2012 and be prepared to make adjustments, if necessary, when the Commission considers the APS 2013 REST Plan.

14. Staff recommends approval of the other DE Program enhancements as discussed herein.

15. Staff recommends that third-party incentives for the Schools and Government Program be capped at $0.12 per kilowatt hour for 15-year contracts and $0.10 per kilowatt hour for 20-year contracts. Total incentives per project would be capped at 40 percent of total system installed cost. APS should change its project selection criteria to select the lowest-cost third-party incentive projects, similar to the existing non-residential PBI.

    In regard to the APS proposal to allow expansion of utility-owned Schools and Government projects, Staff recommends that APS be allowed to expand utility-owned projects by an additional 15 MW that would focus on the most economically challenged schools in all areas of APS' service territory.

16. Staff recommends approval of an additional 10 MW of third-party schools projects, but only if they are allocated by a least-cost method and subject to Staff's proposed incentive caps. Total incentives per third party project would be capped at 40 percent of the total system installed cost.

17. Staff recommends approval of the funding of the Integrated Pilot Program at a reduced budget level as discussed herein.

18. Staff recommends approval of Staff's proposed budget changes as discussed herein.

19. Staff recommends Commission approval for APS to build an additional 100 MW of utility-owned solar generation through the AzSun Program. The recovery mechanism would be the same as that for the first 100 MW phase.

20. Staff recommends that the Commission approve APS' request to recover the revenue requirements of the Chino Valley Project through the RES adjustor. Staff recommends that the system start-up be delayed until September 30, 2012. Staff recommends that the revenue requirement for this project be set at $3.6 million in 2012.

21. Staff recommends that the Commission reduce the Research, Commercialization, and Integration budget by $500,000 from $1.8 million to $1.3 million.

22. Staff recommends approval of the proposed changes in the Customer Outreach, Marketing, and Partnership Development Programs.

23. Staff recommends approval of the amended Rate Rider Schedule SGSP.

24. Staff recommends approval of 25 MW of new utility-owned and operated renewable systems to be installed in the 2014 and 2015 timeframe.

25. Staff recommends that in future REST plans the burden of proof will be borne by APS to justify the use of ratepayer funds to pay for marketing and advertising if APS proposes to use ratepayer funds for marketing in future REST plans.

26. Staff recommends approval of the formation of the REST Format Working Group as discussed herein. APS and other utilities would submit the Working Group's report and recommendations by September 1, 2012, for Staff approval.

27. Staff recommends approval of the APS Adjustment Schedule RES as modified herein.

28. Staff recommends approval of the Renewable Energy Standard Adjustment Schedule Plan of Administration as modified herein.

29. Staff recommends that APS file tariffs in compliance with the Decision in this case within 15 days of the effective date of the Decision.

Steven M. Olea
Director
Utilities Division

SMO:RTW:lhm\MAS

ORIGINATOR: Ray Williamson

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 ARIZONA PUBLIC SERVICE COMPANY – APPROVAL OF ITS 2012 RENEWABLE ENERGY STANDARD IMPLEMENTATION PLAN AND REQUEST FOR RESET OF RENEWABLE ENERGY ADJUSTOR	DOCKET NO. E-01345A-11-0264 DECISION NO. __________ ORDER

Open Meeting
November 8 and 9, 2011
Phoenix, Arizona

BY THE COMMISSION:

FINDINGS OF FACT

1. Arizona Public Service Company ("APS" or "Company") is certificated to provide electric service as a public service corporation in the State of Arizona.

2. On July 1, 2011, APS filed its application for approval of its 2012 Implementation Plan ("2012 Plan") pursuant to the Renewable Energy Standard and Tariff ("REST") Rules.

3. On September 21, 2011, APS filed its Supplementary Filing and Notice of Errata. The supplementary filing included corrections and clarifications of the July 1 application.

The APS REST Implementation Plan 2012 to 2016

4. The APS application includes the 2012 Implementation Plan, Renewable Energy Standard Adjustment Schedules, a Renewable Energy Standard Plan of Administration, a Schools and Government Solar Program Rate Rider Schedule, and an updated Service Schedule 6. In the 2012 Plan, APS offers three different options for Arizona Corporation Commission ("Commission") consideration. The three options include budgets of $129.2 million, $141.2

million, and $151.5 million. The residential RES Surcharge cap would increase by $1.38 in Option 1, by $1.91 in Option 2, and by $2.36 in Option 3.

Table 1: APS' Proposed 2012-2016 Budget Options

	Option 1	**Option 2**	**Option 3**
2012 Budget	$129.2 M	$141.2 M	$151.5 M
2012-2016 Budget	$783.1 M	$810.2 M	$873.8 M
2012 RES Adjustor per kWh	$0.013586	$0.014907	$0.016037
2012 Residential Cap	$5.43	$5.96	$6.41
2012 Non-Res. (under 3 MW) Cap	$201.84	$221.47	$238.27
2012 Non-Res. (3 MW and over) Cap	$605.53	$664.40	$714.81

5. The 2012 Plan design is to achieve and exceed compliance with the 2012 REST Rules requirements. In 2012, APS must obtain 3.5 percent of its total retail energy sales from renewable energy resources, and 30 percent of that renewable requirement must come from distributed energy ("DE") systems. APS expects to exceed the 2012 RES compliance in all categories.

6. In addition to the requirements of the REST Rules, APS must also obtain renewable resources to meet the 2009 Settlement Agreement, as required by Commission Decision No. 71448, issued December 30, 2009, in Docket No. E-01345A-08-0172. Per this Decision, APS must obtain new renewable energy resources with annual generation or savings of 1,700,000 megawatt hours by December 31, 2015. This requirement, in effect, doubles the renewable requirements in the REST Rules. These extra requirements will cause significant budget impacts on the 2012 REST budget.

7. APS contends that once the 2012 REST budget is approved, it must immediately commence procurement activity in order to meet the 2015 Settlement requirements in a cost-effective manner.

8. APS claims that it will need to procure an additional 300 MW or 502,500 megawatt-hours by December 31, 2015, in order to meet the 2009 Settlement requirements.

9. The APS plan includes two approaches to meet its 2009 Settlement requirements. First, APS will need additional customer or third-party owned systems. Second, APS will need

more utility-owned systems. These utility-owned systems will include new additions to the AZ Sun Program. APS would like to procure 150 MW through each of the two procurement methods in order to meet the 2009 Settlement Agreement requirements.

The 2012-2016 REST Program Options

10. APS believes that Option 1 is the minimal budget needed to meet the 2012 REST requirements and the 2009 Settlement Agreement obligations. Option 3 reflects the Commission order in the APS 2011 REST Plan docket to have a 2012 residential DE budget of $40 million. Option 2 falls in between the two other options, offering the Commission another choice in lieu of Option 1 or 3.

Option 1:

11. This option includes 150 MW to be procured via Purchased Power Agreements ("PPAs") in 2012 through 2015.

12. Option 1 does not include a budget item for additional non-residential DE projects, since APS expects to be in compliance with the 2012 REST requirements without any additional non-residential projects. This option includes only enough funding needed to meet the 2012 residential DE requirement. The residential DE budget portion of Option 1 is $20 million. This would add about 17 MW of new residential capacity in 2012. The total Option 1 budget would be $129.2 million.

Option 2:

13. Option 2 would include procurement of 125 MW through PPAs in the period of 2012 through 2015. It would continue the non-residential DE Program with a 25 MW expansion between 2012 and 2014. APS would not fund any large scale projects (greater than 200 kW) in this option. APS would allocate $2 million for small, non-residential projects (less than 30 kW) using Up-Front Incentives ("UFI"). A total of $100,000 in 2012 would be reserved for medium-sized (30-200 kW) projects. This would represent a $10 million increase in total lifetime commitment for each year between 2012 and 2014. Option 2 would allocate $30 million to the residential DE program, which would add about 26 MW of new residential capacity in 2012. The total REST budget under Option 2 is $141.2 million.

Option 3:

14. In Option 3, APS would solicit 100 MW through PPAs in the period 2012 through 2015. This option would expand the non-residential DE program by 50 MW during the period from 2012 to 2014. A budget of $2 million would be budgeted for Up-Front Incentives for small non-residential projects. A budget of $300,000 in 2012 would be used for large and medium-sized projects. This would represent a lifetime commitment of $20 million each year between 2012 and 2014. This would result in 50 MW from medium and large projects. As ordered in Decision No. 72022, Option 3 would include $40 million for residential DE incentives which would procure about 34 MW of capacity. The Option 3 budget would be $151.5 million.

Residential Incentive Funding

15. APS is proposing residential incentives of $1.30/Watt, which would continue to decrease with market-driven triggers. APS proposes to decrease the incentive for residential geothermal systems from $0.90/kilowatt hour of first-year savings to $0.80/kilowatt hour.

16. APS proposes to allocate $3 million of the residential incentive funds to the Rapid Reservation Program. APS also proposes to set-aside 15 percent of the residential budget for non-photovoltaic ("PV") technologies. Finally, APS proposes $2.6 million for the Energy Star® Plus Solar Homes Program.

17. A number of favorable comments were provided on the APS proposal to fund the Energy Star® Plus Solar Homes Program at $2.6 million. They included Shea Homes and Keystone Homes. American Solar recommended that the Solar Homes Program funding be increased to $4 million in 2012 and that the homebuilder incentive be reduced to $1.25 per watt.

18. On September 15, 2011, in Decision No. 72592, the Commission approved an application by APS to offer $1/watt as the residential UFI incentive. At $1 per watt, APS has been receiving an average of 50 applications per week. At that rate, the residential market in the APS service area appears to be around 2,600 systems per year. APS has indicated that its average system size is 7 kW. If the 50 applications per week holds, the average size system remains 7 kW, and the incentive were to remain at $1 per watt, the total incentive budget for 2,600 systems would be $18,200,000. Under APS Option #1, the $20 million residential budget allocates $2.6 million

for the Solar Home Program, \$3 million for non-PV incentives, and only \$14.4 million for PV incentives. So, the \$1/watt incentive would fund only about 2,057 systems per year of demand in the residential market, not 2,600.

19. Staff believes that the \$1/watt incentive for residential UFI incentives has shown that there is a strong market for residential PV systems. In order for APS to maximize the use of its incentive funds and install the optimum amount of solar per budget dollar in 2012, Staff recommends that rather than the \$1.30 per watt incentive proposed by APS on July 1, 2011, the incentive should be set at \$0.85 per watt on January 1, 2012. Therefore, Staff also recommends against any further funding of the Rapid Reservation Program.

20. Staff recommends an automatic trigger mechanism to lower PV incentives in order to avoid severe disruptions in the residential marketplace in 2012. Under Staff's proposal for residential DE, the PV UFI would be reduced to \$0.70 per watt if 45 percent of incentive funds are reserved on or before June 30, 2012. The second trigger would, if the June 30, 2012 trigger had been reached, reduce the incentive to \$0.50 per watt if 70 percent or more of the incentive funding is reserved prior to September 30, 2012. If the June 30, 2012 trigger has not been reached, then the second trigger would reduce the incentive to \$0.70 per watt. The third trigger would involve a step-down in the incentive level if 90 percent of incentive funding is reserved on or before November 30, 2011. The incentive would then be reduced to \$0.50 per watt if both previous triggers were reached, \$0.50 per watt if one previous trigger was reached, and \$0.70 per watt if no previous triggers were reached in 2012. The chart below lays out how the overall trigger mechanism would work.

Table 2: Staff's Proposed Incentive Triggers and Levels

Date of Trigger	**Compliance Level to Activate Trigger**	**Incentive Level if Trigger Activated**
On or before June 30, 2011	45%	\$0.70 per watt
On or before September 30, 2011	70%	\$0.70 per watt if June 30 trigger is not activated. \$0.50 per watt if June 30 trigger is activated.

On or before November 30, 2011	90%	$0.70 per watt if no previous 2012 triggers activated. $0.50 per watt if one or both previous 2012 triggers activated

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

22. Any cancelled project funds added back to the budget would be funded last and allocated at the $0.70 per watt incentive level if the first trigger is reached, or at $0.50 per watt if the second or third trigger is reached. The residential customer will only be able to collect an incentive up to 40 percent of the total system installed cost.

23. Staff proposes an alternative way to fund and encourage more residential solar demand. First, Staff believes that APS should reduce the new home builder incentive from the current $1.75 per watt to $0.85 per watt. Next, APS should increase the proposed funding of the Energy Star® Plus Solar Home Program from $2.6 million to $3 million.

Non-Residential Incentives

24. Staff proposes to reduce the non-residential Up-Front Incentive from $1.75/watt to $0.85/watt. Project owners would be able to collect up to 40 percent of the system cost in incentives. This reduction is consistent with other PV incentive reductions that have occurred over the past few years in residential UFI and non-residential production-based incentives ("PBIs"). It is also consistent with Staff's recommendations for other incentive reductions in the APS 2012 REST Plan.

APS' Proposed Elimination/Reduction of Non-Residential PBI and UFI Funds

25. Several commenters decried APS' proposal to reduce or eliminate non-residential PBI funds over the next five years. They included Vestar, Green Choice Solar, AriSEIA, WalMart, and the Biltmore Bank of Arizona. They argue that to eliminate or reduce the non-

residential PBI incentives would restrict non-residential customers from REST funding, while APS would continue to collect monthly REST surcharges in funding the program. Staff agrees with the intervenors that the APS approach would be unfair to all the non-residential customers wanting to install renewables under the REST Program. Staff, in its proposed Options A and B has recommended funding levels that will continue a limited non-residential program in 2012 and beyond. However, Staff's recommendations will significantly reduce the cents per kWh PBI incentive and the cap on the allowable total incentives per project.

26. Staff believes that APS needs to continue a reasonable level of support for non-residential projects over the next five years. In addition, Staff believes that the PBI incentive levels and the cap on total incentives collected must decrease significantly in 2012. In the residential program, incentives have fallen in the last two years from $3 to $1/watt. Two years ago, residential customers could collect $3 per watt up to half of the system cost. Today at $1 per watt and an average installed system cost of $5 per watt, the residential incentive only provides about 20 percent of the installed system cost. Staff believes that a similar reduction in non-residential incentives is due and that without such a reduction, the cost of non-residential PBIs will, over time, drive up ratepayer REST monthly charges to unacceptable levels.

27. Staff notes that public comments on the APS Plan said it would "eliminate free market competition" and "cripple" the PBI program. Staff believes that the REST Program needs more robust free market competition. Staff believes that its non-residential PBI incentive proposal will signal a new wave of encouragement for lower-cost non-residential installations.

28. In the current APS Distributed Energy Administration Plan ("DEAP"), the PBI incentive caps for 10, 15, and 20-year plans are 15.4, 14.3, and 13.8 cents per kWh, respectively, and the customer may collect up to 50 percent of the installed system cost in incentives. To be consistent with incentive cap reductions in the residential program, Staff recommends that the non-residential PBI incentive level limits be reduced to $0.084 per kWh for 10-year contracts, $0.082 per kWh for 15-year contracts, $0.08 per kWh for 20-year contracts and that customers shall only be allowed to collect up to 40 percent of the total system installed cost of projects approved in 2012.

29. Staff notes that merely dropping the incentive level from $0.138 per kWh to $0.08 per kWh is insufficient for the utility to reduce the total lifetime incentive for a given project. Having a lower incentive of 8 cents will only mean that it will take the customer a few more years to collect the remainder of its allowable 40 percent of installed costs. In order to truly reduce the incentive costs to APS, the cap on lifetime incentives for non-residential projects must be reduced to 40 percent of the total system installed cost.

DE Program Enhancements

30. APS is proposing changes to its incentive program administration processes to handle the issuance of Internal Revenue Service Form 1099 to residential incentive recipients. APS proposes a new monitoring program to install production meters for small residential and non-residential PV systems that receive Up-Front Incentives. The production meters would be in addition to the bi-directional meter used for billing the customer. The meter will validate the PV production at the customer level. APS hopes to install 7,200 meters in 2012 at a budget cost of $600,000.

31. Two comments were received on the metering proposal. First, the Solar Alliance asked APS to justify the meter installation proposal and asked who would fund the installation of the meters. Solar City expressed concern about APS installing meters retroactively on existing systems. Staff has reviewed the APS proposal and recommends that it be deleted from the APS 2012 plan. In a year when APS is asking for increases from $30 million to over $50 million, Staff believes every dollar in the budget must be justified. Staff believes that the $600,000 in meter installation cost would be better spent on non-residential system incentives. However, if APS truly believes that this metering is essential, Staff recommends two possible options. First APS could fund the meters out of non-RES funding sources. Second, APS could develop a program for 2013 using a small random sampling of new residential PV systems with new meters. If, by the end of 2013, APS finds that the random sample shows a significant number of new systems are under-performing, APS could ask the Commission to expand the metering program in 2014.

32. As suggested by solar industry representatives, and required by Decision No. 72022, the APS 2012 REST Plan includes a required security deposit for all non-residential PBI

program applicants. The Applicant will be required to submit a reservation deposit to APS equal to five percent of the total lifetime PBI commitment request for the reserved project. If the full reservation deposit is not received by APS within seven business days, the conditional reservation will be cancelled and the reservation funds will be awarded to the next ranked project. Once a project is successfully interconnected, with all required paperwork submitted to APS, and has passed inspection, the reservation deposit will be refunded to the applicant.

33. Several parties commented about the APS-proposed security deposit. Green Choice Solar supports the APS proposal "without any changes." Solar City complained that the requirements "are too stringent and that the proposal ties up capital." The Arizona Solar Energy Industries Association ("AriSEIA") objected to the APS Security Deposit proposal, but provided an alternative proposal:

- An initial deposit is required for performance based incentive projects in the amount of $3,000 for systems 200 kW AC and under, $6,000 for systems greater than 200 kW AC and less than 500 kW AC, and $10,000 for systems over 500 kW AC to the 2 MW limit. This deposit is due 30 days after APS notifies the customer of the incentive award. APS will continue to make new awards to replace forfeited awards until the category's next respective auction, and then roll unused funding into the next period.

- A second deposit of 2 percent of the lifetime incentive funding requested shall be required. This deposit is due 120 days after notification of award. In lieu of a cash payment, customers may submit bonds or letters of credit for the corresponding amounts. APS will continue to make new awards from the most recent auction within funding category to replace forfeited awards until two weeks before the category's next respective auction, and then roll unused funding into the next period.

- Deposits may be submitted on behalf of APS customers by installers, dealers or other parties.

- The current progress milestone requirement at 90 days shall be extended to 120 days, coinciding with the second deposit due date and 120 day milestone.

34. Staff has reviewed the AriSEIA proposal and recommends that it replace the APS security deposit proposal. Staff is aware that this approach may not fully solve the "phantom project" problem, so Staff recommends that the Commission order APS to evaluate the AriSEIA

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security deposit approach during 2012 and be prepared to make adjustments in the 2013 REST Plan, if it fails to solve the phantom project problem.

35. APS has, at the suggestion of the solar industry, added a requirement that all applications for the residential UFI program must include submission of a complete, executed contract between the customer and solar installer/developer, including the technical specifications for the project.

36. APS proposed to update its Distributed Energy Administration Plan ("DEAP"). Included will be additional requirements for leased systems to provide documentation naming the actual owner of the residential DE system. APS also proposes to prorate incentives for solar water heaters that are installed at less than optimal tilt and orientation, due to reduced energy savings for those sub-optimal installations. Staff agrees with all of the proposed changes to the DEAP and recommends Commission approval.

Schools and Government Program

37. APS is proposing to narrow the criteria ranges on the Project Ranking Matrix in order to better evaluate the economic status of schools. All other requirements remain unchanged.

38. APS claims that the strong market response for third-party incentives in the 2011 Schools and Government Program shows that a high incentive level is no longer needed for economically challenged districts. APS wants to lower the current approved PBI rate for 2012 of $0.145 per kilowatt-hour ("kWh") for 15-year contracts to $0.123/kWh and the current approved PBI rate of $0.132/kWh for 20-year contracts to $0.112/kWh. APS claims that reduction of the incentive will allow it to fund more projects during a nomination program.

39. The APS Plan allocates $65.8 million of the lifetime commitments to the third-party PBI projects and expands the Up-Front Incentives budget for solar daylighting installations by $562,500. APS would update the School and Government Solar Program Rider Rate Schedule to reflect the changes.

40. APS has seen increased customer interest in the Schools and Government Program, particularly from economically-challenged school districts. In the 2012 APS Plan, APS is asking for authorization to expand its deployment of utility-owned systems by 25 MW for economically

challenged schools as well as government facilities in 2012 and 2013. This would be in addition to the 2011 Schools and Government projects approved by the Commission in Decision No. 72022 and amended by Decision No. 71274.

41. The only change would be the elimination of the restriction that limits the APS-owned option to only rural schools. APS states that this change will offer all economically-challenged schools another option to deploy solar resources. The installation, operation, and maintenance of the systems would be managed by third-party installers/developers. The renewable energy from the utility-owned systems would not be counted toward meeting the RES distributed energy requirements. The renewable energy would be credited toward the overall RES requirement of APS. This expansion of utility-owned solar systems would increase the budget by $2.9 million.

42. Numerous parties submitted comments on the APS Schools and Government Program. Green Choice Solar claims that the expansion of the Schools and Government Program comes at the expense of the non-residential PBI program. The Arizona Solar Energy Industries Association insists that the third-party ownership approach is the best method and that the percentage of utility ownership in the Schools and Government Program should be reduced to 0 percent. Solar City says that any expansion in the program should be equally divided between third-party owned systems and utility-owned systems. Solar City also expressed concern about APS' proposed reductions of the incentives in the Schools and Government Program. The Solar Alliance developed a new proposal for the REST Plan including recommended changes to the Schools and Government Program. The Solar Alliance opposes the APS-proposed reduction in third-party incentives for schools.

43. Staff agrees with some of the stakeholders that APS' proposed reduction of PBI funding for the 2012 REST Plan could reduce competition in the renewable marketplace. Staff believes that increased competition in the Schools and Government Program can help to encourage a more competitive non-residential marketplace in Arizona. However, offering fixed third-party incentives does not allow for robust price competition.

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44. In response to a data request from Staff, APS provided data to Staff about the demand for Schools and Government Program project funding. During the first three funding cycles of 2011, APS received 44 applications requesting funding for 11.7 MW of PV installations. Of the 44 applications received, APS was able to fund 16 projects by reserving $10.89 million in incentives. There were 28 school projects, totaling 8.3 MW of capacity that APS was unable to fund. The government part of the Schools and Government Program received 27 applications, but APS only had funding for 6 projects. These six projects will provide 1.22 MW of capacity. The other 21 applications which were not funded totaled 5.01 MW of capacity.

45. These recent numbers convince Staff that setting a fixed PBI incentive number for the Schools and Government Program is a mistake. The 28 unfunded schools projects and the 21 unfunded government projects are proof that there is a significant demand for Schools and Government funding and that schools and government projects should compete on a least-cost basis, similar to the very successful competition in the APS third-party non-residential PBI program. The competition in the regular PBI program has been so successful that APS has reserved enough capacity to meet its non-residential REST requirements for the next five years. Staff believes that similar project competition in the Schools and Government program can significantly reduce the delivered cost per kWh, fund more projects and install more MW of capacity per dollar of budget allocation.

46. Staff, therefore, recommends that third-party incentives for the Schools and Government Program be capped at $0.12 per kilowatt hour for 15-year contracts and $0.10 per kilowatt hour for 20-year contracts. Total incentives per project would be capped at 40 percent of total system installed cost. APS should change its project selection criteria to select the lowest-cost incentive projects, similar to the existing non-residential PBI program that has worked so well over the last few years.

47. In regard to the APS proposal to allow expansion of utility-owned Schools and Government projects by 25 MW, Staff recommends that APS be allowed to expand utility-owned projects by an additional 15 MW that would focus on economically challenged schools in all areas of APS' service territory. Further, Staff recommends approval of an additional 10 MW of third-

party projects, but only if they are allocated by a least-cost method and subject to Staff's proposed incentive caps. Total incentives per third party project would be capped at 40 percent of the total system installed cost.

48. In the Schools and Government Program, APS has proposed reductions for most of the solar charges and increases for a few solar charges in the APS Rate Rider Schedule SGSP. This revised Rate Rider Schedule would fund projects at the most economically challenged schools in all areas of the APS service territory. Staff recommends approval of these changes.

Marketing and Advertising Costs

49. APS has typically included a marketing budget in its annual REST plan filings. For the proposed 2012 REST plan budget, APS has proposed $3 million in funding for customer programs, including marketing and advertising. This funding is included on Lines 34 and 35 of REVISED Exhibit 2A of the APS 2012 REST Plan. These are the line items entitled "Renewable Energy Incentive Program Non-Incentive Costs" on Line 34 and "Advertising" on Line 35. In the "non-incentive costs" line, a number of the programs are continuations of programs approved by the Commission in 2008, 2009, and 2010. A few programs have three year contracts with third-party vendors. For this reason, Staff only recommends a reduction of $300,000 in the "non-incentive cost" budget line. Staff recommends a $500,000 reduction in advertising costs in the budget.

50. Staff believes that with the significant growth in the renewable energy industry in Arizona in recent years, there are now many venues for publicizing renewable energy technologies and programs, and the renewable energy industry should bear the primary responsibility for marketing renewable energy in Arizona. Therefore, the need for continued funding of marketing and advertising by APS' ratepayers has declined significantly. Thus, Staff is recommending approval of a $800,000 reduction in marketing and advertising costs as described herein. Staff further recommends that in future REST plans, the burden of proof will be borne by APS to justify the use of ratepayer funds to pay for marketing and advertising if APS proposes to use of ratepayer funds for marketing and advertising in future REST plans.

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Integrated Pilot Program

51. As ordered by the Commission in Decision No. 72060, APS has developed a Pilot Program that coordinates the integration of Smart Grid technology with DE, energy efficiency ("EE"), and demand response ("DR") technologies. The Pilot would involve customers served by the APS Pioneer Substation located near I-17 and Carefree Highway in North Phoenix. Up to 100 Pilot customers would be offered incentives for installing grid-tied PV systems with an APS-owned Smart inverter and a suite of "Smart Home" technologies. APS would like to collect $1.5 million associated with the DE component of the offering. This would include system integration costs, project management, incentives for PV systems, and the revenue requirement associated with the APS-owned inverters through the RES adjustor.

52. A few comments addressed the funding of the Integrated Pilot Program, questioning the use of REST funding for such an application. Staff has reviewed the APS request and believes that some funding for the Integrated Pilot Program is appropriate and that, since APS was ordered by the Commission to develop such a project, the funding should be approved in the 2012 REST Plan, but at a level of $700,000 rather than the $1.5 million originally requested.

Utility-Owned Projects

53. APS contends that the acquisition of solar resources via utility ownership is consistent with APS resource planning efforts. APS claims that the "cost to customers as a whole is significantly less for utility-owned projects over the life of a renewable energy asset, as compared with the cost of purchased power."

54. APS mentions that 97 percent of its current 227 MW of renewable generation capacity is owned and financed by third-party developers. If the additions proposed in the 2012 plan are approved, APS would have by year-end 2015, a portfolio of 886 MW of third-party owned and financed capacity (totaling 78 percent of total capacity) and 256 MW of APS-owned resources (totaling 22 percent of total capacity).

55. APS is requesting Commission approval for cost recovery of the revenue requirements associated with the renewable ownership programs (to include property taxes, depreciation expenses, operating and maintenance expenses, and return on debt and equity using

the pre-tax weighted average cost of capital approved in the Company's most recent general rate case). This recovery would be through the RES adjustor until such time as the costs may be reflected in base rates. APS mentions that this recovery method is consistent with Section 15.7 of the 2009 Settlement Agreement approved in Decision No. 71448 and with the Commission decisions related to the Community Power Project (Decision No. 71646), the AzSun Program (Decision Nos. 71459 and 71502), and the Schools and Government Program (Decision Nos. 72022 and 72174).

56. In its September 21, 2011, Supplementary Filing & Notice of Errata, APS corrects the figures shown on Page 13, Lines 11-12 of the original APS application. In that correction, APS states that the total renewable capacity under proposed APS Option 2 is 756 MW, of which 79 percent would be third-party owned and financed and 21 percent would be APS-owned.

57. The issue of how much renewable generation should be utility-owned and how much should be owned by third parties is the most controversial item in the REST Plan. Staff believes that the Commission should be aware of two important aspects of the policy issue.

58. First, over the past few months there has been a healthy discussion between the Solar Alliance and APS over which approach, utility-owned or third-party owned, is the best deal for ratepayers. This issue was discussed at the APS REST stakeholder meeting on September 30, 2011. At that meeting, it appeared that APS and the Solar Alliance agreed that the cost to non-participating ratepayers was about comparable, no matter who owned the system. Basically, this means that neither approach is vastly superior to the other in terms of impacts on non-participating customers. Assuming that is correct, Staff believes that the Commission should consider the second aspect of the issue.

59. The second aspect is related to how the APS customers will pay for the renewable generation required by the REST Rules and the 2009 APS Settlement Agreement. Currently, renewable generating projects owned by APS, such as the AzSun Projects, have their revenue requirements funded through the APS adjustor until the generation is included in the rate base as a result of a rate case. This has the short-term effect of increasing the REST adjustor charge for a

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while, while the revenue requirements are being collected through the REST adjustor and then the adjustor drops in the year that the assets are moved into rate base.

60. The best description of this effect is shown on Line 3 in Revised Exhibit 2A of the APS September 21, 2011, Supplemental Filing and Notice of Errata. Line 3 is for Purchases and Generation. In 2012, that line shows $67.5 million, but in 2013, the amount in Line 3 drops to $46 million. This shows the impact of the first phase of AzSun projects being moved into rate base. In 2014, Line 3 increases (temporarily) to $104.8 million and in 2015, it drops again to $84.3 million when the next set of utility-owned renewable generators are moved into rate base.

61. If the Commission were to agree to the proposals to block APS from new ownership of renewable generators and, instead, require that the funding go to third-party PBIs and PPAs, the resulting PBI and PPA funding commitments would remain in the REST budget for up to 20 years. Each year, that commitment would be joined by a new set of 10 to 20-year PBI/PPA commitments. Unlike utility-owned assets which would be removed from the REST adjustor every few years as they are added to rate base, the PPA/PBI commitments will never be removed from the adjustor, causing the REST budget to continue increasing every year.

The Expanded AzSun Program

62. The 2012 expansion of the AzSun Program continues the program that the Commission first approved for the initial 100 MW phase of the AzSun program in 2010. APS is requesting authorization to develop another 100 MW of solar generation through the AzSun Program. APS expects that about 18 MW will start operating in 2013, approximately 32 MW will start up in 2014, and approximately 50 MW will start up in 2015.

63. Staff recommends Commission approval for APS to build an additional 100 MW of solar generation through the AzSun Program. The recovery mechanism would be the same as that for the first 100 MW phase.

Funding of the Chino Valley Project

64. APS is also requesting Commission authorization for recovery of $5.3 million in revenue requirements for the 19 MW of the Chino Valley Project, which was part of the second 50 MW of AzSun projects approved by the Commission in Decision No. 71502. In that Decision, the

Commission assured cost recovery for the entire 100 MW of the first phase of AzSun projects. However, the Commission deferred determining the recovery mechanism for the second 50 MW to the rate case that APS filed on June 1, 2011.

65. APS would like an earlier decision on the cost recovery mechanism for the Chino Valley Project. APS says that this earlier decision would let the construction start in January 2012 and the project would be operational by the end of 2012. APS projects that $20 million of labor and materials will be sourced from the Chino Valley area, and the new system will provide an increase in the local tax base.

66. Staff recommends that the Commission approve APS' request to recover the revenue requirements of the Chino Valley Project through the RES adjustor. APS had originally requested $5.3 in recovery of revenue requirements. Staff recommends that the system start-up be delayed until September 30, 2012. This would reduce the revenue requirement in 2012 by $1.7 million, dropping the revenue requirement for this project from $5.3 million to $3.6 million in 2012.

Other Key Programs

Schedule 6: Interconnection Study Service

67. In Decision No. 72022, the Commission approved Service Schedule 6. Service Schedule 6 streamlines the interconnection process for non-DE projects on the APS distribution system. It provides APS an opportunity to assess engineering study fees and appropriate application fees.

68. APS proposes to change Service Schedule 6 to include non-FERC projects that interconnect at or above the 69 kV level. This change will accommodate developers wishing to accomplish transmission interconnection under a non-FERC process. The applicant would pay the actual cost for each of the three levels of non-FERC transmission studies. The applicants would provide a deposit prior to the start of the studies. There would be a true-up once the studies are completed.

69. Staff recommends approval of the changes to Service Schedule 6.

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Research, Commercialization, and Integration

70. A total of $1.8 million is allocated for Research, Commercialization, and Integration in the APS 2012 Plan. Studies include the high penetration of distributed resources and impacts on the distribution system, energy storage, and solar cost integration studies. Also included are studies about combined solar, plug-in hybrid electric vehicles and solar water heating analysis.

71. Staff recommends that the Commission reduce the Research, Commercialization, and Integration budget by $500,000 from $1.8 million to $1.3 million.

Customer Outreach, Marketing, and Partnership Development

72. APS proposed a program of customer outreach, marketing and partnership development to meet the RES requirements. Included is a continuation of the Qualified Solar Installer and Trained Solar Installer Program. APS wants to further expand the APS Energy Star® and Solar Homes Program. APS would continue with its website, aps.com and the ArizonaGoesSolar.org website. APS is proposing the discontinuation of its residential financial lending incentive, due to lack of participation by lending institutions.

73. Staff recommends approval of these changes.

Customer/Community-Sited Utility-Owned Resources

74. In addition to the APS request for approval of 25 MW of utility-owned schools projects in 2012 and 2013, APS has requested approval for 25 MW of utility-owned customer and/or community-sited community resources in 2014 and 2015. APS plans to provide more details about this new community-sited effort when it files the APS 2013 RES Implementation Plan.

75. Staff has reviewed the APS request for 25 MW of new utility-owned and operated community-sited projects and recommends approval.

Staff's Concerns About REST Plan Formats

76. Staff is concerned that the REST Implementation Plans and REST Compliance Reports are so diverse in format and content that it is difficult, if not impossible, for Staff and the Commissioners to compare the programs and results from one utility to another. Staff believes

that, by developing a standardized template format for both the Implementation Plans and Compliance Reports, Staff, Commissioners, industry stakeholders and the general public will better be able to consider and compare the plans and performance of all Arizona utilities subject to the REST Rules.

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

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

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

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New Proposals by Stakeholders

80. In the past month, two organizations have submitted alternative proposals to the three APS options. They are the Solar Alliance and Green Choice Solar.

81. The Solar Alliance ("SA") proposal would deploy 300 MW of renewable capacity in 2012 and 2013. The SA proposal would reduce the APS-owned portion of the Schools and Government Program and shift funds to third party owned projects. The proposal would also reduce the small commercial UFI funding and medium and large non-residential PBI funding from the APS proposal. Similarly, the SA proposal would reduce the residential DE incentives proposed by APS in APS Option 3. SA contends that its proposal can be accomplished with a residential surcharge cap of $5.92.

82. The Vote Solar Initiative provided comments in support of the Solar Alliance Proposal. Vote Solar believes the SA proposal is an improvement on APS' three options and that the SA proposal "provides greater near term market certainty" than the APS options.

83. Staff has reviewed the SA proposal. Staff notes that, unlike the APS proposed three options which show the five-year budget impact of the three options, the SA proposal only shows a proposal for shifting MWs of capacity from utility ownership to third-party ownership.

84. Staff believes that the Solar Alliance has not provided a convincing argument of why the Commission should select the SA proposal. It is tempting to make the comparison only for 2012, but that provides Staff and the Commission with little data upon which to make a decision. Most non-residential projects approved in 2012 will not reach start-up until 2013, when a series of incentive payments will commence for up to 20 years. So, when considering PPAs and PBIs approved in 2012, the full REST budget impact will not be seen until 2014 when APS will likely see its first full year of incentive payments for the new projects.

85. The Commission should consider the phenomenon that Staff calls the "PBI Paradox." In the past, non-residential PBI projects have looked like a "great deal" because, even at an incentive of 10-15 cents per kWh, the projects appear to be a "bargain." If the incentive payments are low, say $100,000 or $200,000 per project per year, the near-term budget impact is minimal. However, each year, new contracts are added to the APS long-term payment

requirements. Each new contract permanently increases the annual REST budget. Unlike Up-Front Incentives, which pay once for a lifetime of renewable kWh and pay nothing in future years, the PBI payments are a commitment for the life of the contract.

86. Green Choice Solar introduced four new proposals: Options A, B, C, and D. Unlike the Solar Alliance proposal, which shifts MWs from APS and from non-residential PBIs to third-party PPAs, Green Choice Solar's proposals shift MWs from APS ownership or third-party PPAs to non-residential PBIs.

87. Staff has reviewed the Green Choice Solar proposals. Staff believes that the Green Choice Solar proposals have a problem similar to that of the Solar Alliance. Green Choice Solar's proposals merely shift around the MWs from one ownership option to another. Similar to the Solar Alliance, Green Choice Solar failed to demonstrate the multi-year budget impact of its proposed proposals. Without a budget impact comparison of Green Choice Solar's proposals to the APS and Solar Alliance proposals, it is impossible to determine which proposal offers the ratepayers the best long-term deal. Staff finds no convincing evidence that the proposals by the Solar Alliance and Green Choice Solar are better for ratepayers than the APS approach.

Staff's Proposed Budget Changes and Recommended Options

88. The following are Staff's proposed changes to the APS REST Plan budget proposal, as outlined in APS REVISED Exhibit 2A, filed on September 21, 2011:

> Line 3 (Purchases and Generation): By delaying the start-up of the Chino Valley project until September 30, 2012, the Revenue Requirements for that project should be reduced by $1.7 million from $5.3 million to $3.6 million.
>
> Line 22 (Schools and Government): By delaying the in-service dates for certain projects, the budget for 2012 should be reduced by $1.7 million.
>
> Line 23 (APS Customer Sited Community Solar): APS should reduce the funding in this program by $1.5 million. This reduction reflects a mid-year deployment.
>
> Line 24 (EE/RE Integrated Pilot): APS should reduce the funding in this program by $800,000. This reduction reflects the new, lower incentive levels that will be available in 2012.
>
> Line 25 (Energy Assistance for Renewable Neighborhoods): APS should reduce the funding in this program by $300,000 to reflect lower incentive levels.

Line 32 (Implementation): APS should reduce expenses by $300,000 from $5 million to $4.7 million. This reflects the reduced need for meters in 2012 due to greater than expected installs in 2011.

Line 34 (Renewable Energy Incentive Program Non-Incentive Costs): APS should reduce funding by $300,000 from $2.3 million to $2.0 million.

Line 35 (Advertising): APS should reduce its Advertising by $500,000 from $700,000 to $200,000.

Line 40 (Research, Commercialization, and Integration): APS should reduce funding in this program by $500,000 from $1.8 million to $1.3 million.

Line 45 (Residential and Commercial DE): Changes in this line will be detailed in Staff's Option A and Option B proposals.

89. Staff has reviewed the APS 2012 REST Plan application and the comments of stakeholders and interested parties. Staff has developed for Commission consideration two proposed options that are similar to APS Options 1 and 3, but have been modified in a number of places. Staff's two options are named Staff Option A and Staff Option B. The budget impacts of these two options are compared to APS' Options 1-3 in Table 10.

90. Staff Option A: Option A is similar to Option 3 in the APS 2012 REST Plan. Staff believes that Option A allows Commissioners to permit APS to operate programs that will allow it to meet the REST Rules requirements, the 2009 Settlement Agreement requirements for renewable generation and the Schools and Government Program as well as meeting the spirit of the Commission order in Decision No. 72022, requiring the funding for the residential solar program to be maintained at $40 million in 2012.

91. Staff notes that the residential PV marketplace has changed significantly since December 2010. The greatly reduced cost of PV panels and the significant reduction in PV system installed costs has convinced Staff that a lower PV UFI is appropriate for residential customers in 2012. In addition, Staff notes that since June 2011, when the $1/watt Rapid Reservation Program began to attract a significant number of customers, APS has averaged approximately 50 applications per week, which indicates that the residential demand for PV systems is approximately 2,600 systems per year at $1/watt.

92. Staff recommends that a portion of the $40 million originally planned for residential systems be re-allocated to non-residential UFI incentives and PBI incentives. Staff agrees with some of the solar industry's comments that the APS plan for non-residential PBI systems as proposed in APS Options 1, 2, and 3 could have a damaging impact on the non-residential solar industry in Arizona.

93. For Staff Option A, Staff proposes to reduce the $40 million residential set-a-side to $30 million, including both residential and non-residential applications. This would include $25 million for residential incentives and programs and $5 million for non-residential programs. The Option A incentive package would include:

Table 3: DE Program Proposal for Staff's Option A Compared to APS Option 3

Staff's Option A		**APS Option 3**
DE Program Element	Amount	Amount
Residential PV Incentives	$ 18,000,000	$ 31,400,000
Non-PV Technology Incentives	$ 3,750,000	$ 6,000,000
Energy Star® Plus Solar Homes	$ 3,250,000	$ 2,600,000
Small, Non-residential UFIs	$ 4,400,000	$ 2,000,000
Medium-size, Non-residential PBIs	$ 300,000	$ 150,000
Large size, Non-residential PBIs	$ 300,000	$ 150,000
Total	$ 30,000,000	$ 42,300,000

94. For the non-residential PBI programs, APS would commit to a lifetime commitment for medium-sized, non-residential projects of $20 million in each year between 2012 and 2014. APS would commit to a similar $20 million per year of lifetime commitment in each year between 2012 and 2014 for large-sized, non-residential projects.

95. The total 2012 budget proposed by Staff in Option A is $131.7 million. At that budget level, APS calculates that it would need a surcharge of $0.013861 per kWh with a residential cap of $5.54 per month, a small non-residential cap of $205.94 per month, and a large non-residential cap of $617.83 per month.

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96. Staff Option B: Option B is similar to Option 1 in the APS 2012 REST Plan. This option allows the Commission an approach that provides only sufficient funding to meet the 2012 REST DE requirements and some additional funding toward meeting the Schools and Government Program and 2009 Settlement requirements ordered by the Commission.

97. In the original APS REST Plan document, APS proposed three optional DE incentive budgets: $20 million, $29.9 million, and $40 million. The breakdown of those proposed options is shown below:

Table 4: APS Proposed 2012 Residential Incentive Budget Options (in $Millions)

	Option 1	**Option 2**	**Option 3**
PV Incentive Budget*	14.4	22.8	31.4
Non-PV Technology Incentive Budget**	3.0	4.5	6.0
Energy Star® Plus Solar Homes	2.6	2.6	2.6
Total Incentive Budget by Option	20.0	29.9	40.1

* Includes $3.0 million in each of the three Options for $1/watt incentives
** Represents 15% of total residential incentive budget

98. On September 21, 2011, APS submitted its Supplementary Filing and Notice of Errata. In that filing, APS revised its estimate of funding needed to meet the 2012 REST residential requirement. Due to Commission Decision No. 72592, which reduced the residential incentive to $1/watt, APS calculated that it would take $5.2 million less in 2012 to meet the 2012 residential REST requirement than was originally projected last July.

99. For Staff Option B, Staff proposes to reduce the residential incentive portion to $17 million and add in a non-residential package of incentives of $2 million. The total DE incentive package under Staff Option B would be $19 million, a reduction of $1 million from APS Option 1. The Staff Option B incentive package includes:

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Table 5: DE Program Proposal for Staff's Option B Compared to APS Option 1

Staff's Option B		**APS Option 1**
DE Program Element	Amount	Amount
Residential PV Incentives	$ 11,500,000	$ 14,400,000
Non-PV Technology Incentives	$ 2,500,000	$ 3,000,000
Energy Star® Plus Solar Homes	$ 3,000,000	$ 2,600,000
Small, Non-residential UFIs	$ 1,800,000	$ 0
Medium-size, Non-residential PBIs	$ 100,000	$ 0
Large size, Non-residential PBIs	$ 100,000	$ 0
Total	$ 19,000,000	$ 20,000,000

100. For the non-residential PBI program, APS would commit a total lifetime commitment for medium-sized, non-residential projects of $10 million in each year between 2012 and 2014. The $100,000 large system PBI allocation would represent a total lifetime commitment of $10 million in each year between 2012 and 2014 for the large non-residential systems.

101. The total 2012 budget proposed by Staff in Option B is $120.7 million. At that budget level, APS calculates that it would need a surcharge of $0.012639 per kWh with a residential cap of $5.06 per month, a small non-residential cap of $187.77 per month, and a large non-residential cap of $563.32 per month.

A Comparison of Staff's Proposals and APS' Proposals

102. In order to determine the best approach for APS to follow, a direct comparison of the APS and Staff proposals is appropriate. The first comparison is the monthly customer impact in terms of surcharges and monthly caps.

103. Table 6 below shows the proposed surcharge per kWh for each APS and Staff option as well as the proposed caps under each option, in comparison to what is currently in effect for 2011.

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Table 6: Comparison of Surcharges and Caps

	2011 Approved	2012 APS Option 1*	2012 APS Option 2	2012 APS Option 3	2012 Staff Option A	2012 Staff Option B
REST Charge (per kWh)	$0.0101320	$0.013013	$0.014907	$0.016037	$0.013861	$0.012639
Class Caps						
Residential	$ 4.05	$ 5.21	$ 5.96	$ 6.41	$ 5.54	$ 5.06
Small Commercial	$150.53	$193.33	$221.47	$238.27	$205.94	$187.77
Large Commercial (3 MW+)	$457.60	$579.99	$664.40	$714.81	$617.83	$563.32

***NOTE**: As modified in the APS September 21, 2011, Supplementary Filing.

For comparison purposes, Table 7 below shows the projected MWH by customer class for 2012.

Table 7: Projected MWH Sales by Customer Class for 2012

Customer Class	2012 Projected Sales (MWH)	
Residential	13,320,427	47%
Small Commercial	11,717,866	42%
Large Commercial	3,148,821	11%
	28,187,114	100%

104. Table 8 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.

Table 8: Contribution, Per kWh Consumed by Customer Class

Contribution by Customer Class ($/kWh)	2011 RES Plan	2012 APS Option 1	2012 APS Option 2	2012 APS Option 3	2012 Staff Option A $131.7 M	2012 Staff Option B $120.7 M
Residential	$0.00351	$0.00458	$0.00522	$0.00560	$0.00486	$0.00446
Small Commercial	$0.00413	$0.00526	$0.00600	$0.00644	$0.00559	$0.00512
Large Commercial	$0.00045	$0.00050	$0.00055	$0.00057	$0.00052	$0.00050

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105. The cost recovery by customer class for the approved 2011 REST Plan and estimates for the APS and Staff options for the 2012 REST Plan are shown in Table 9.

Table 9: Cost Recovery/Contribution by Customer Class for Approved 2011 Plan and Proposed 2012 Plans

Contribution by Customer Class ($/kWh)	**2011 RES Plan**	**2012 APS Option 1**	**2012 APS Option 2**	**2012 APS Option 3**	**2012 Staff Option A $131.7 M**	**2012 Staff Option B $120.7 M**
Residential	$46,799,257	$61,055,346	$69,490,699	$74,553,978	$64,801,453	$59,426,665
	49%	49%	49%	49%	49%	49%
Small Commercial	$48,447,436	$61,646,352	$70,293,906	$74,459,603	$65,542,641	$59,987,327
	50%	50%	50%	50%	50%	50%
Large Commercial	$1,153,307	$1,298,302	$1,415,395	$1,486,419	$1,355,906	$1,296,008
	1%	1%	1%	1%	1%	1%
Total	$96,400,000	$124,000,000	$141,200,000	$151,500,000	$131,700,000	$120,700,000

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Table 10: Comparison of APS' and Staff's Budget Proposals

Line No.	($ MILLIONS)	APS	STAFF A	STAFF B
1	Renewable Generation			
2	***Renewable Generation Contracts and O&M***			
3	Purchases and Generation	$ 67.5	$ 65.8	$ 65.8
4	Administration	1.9	1.9	1.9
5	Implementation	1.3	1.3	1.3
6	***Total RG Contracts and O&M***	***$ 70.7***	***$ 69.0***	***$ 69.0***
7	***Offsets***			
8	Estimated Green Choice Revenue Credit	$ (0.6)	$ (0.6)	$ (0.6)
9				
10	***Total Renewable Generation (line 6 + line 8)***	***$ 70.1***	***$ 68.4***	***$ 68.4***
11				
12	Customer Sited Distributed Energy			
13	***Existing Contracts and Commitments***			
14	DE RFP	$ 4.9	$ 4.9	$ 4.9
15	Innovative Technologies	0.2	0.2	0.2
16	PBIs (Existing)	7.9	7.9	7.9
17	Flagstaff CPP	0.4	0.4	0.4
18	Wholesale DE	0.2	0.2	0.2
19	***Total Existing Contracts and Commitments***	***$ 13.6***	***$ 13.6***	***$ 13.6***
20				
21	***New Incentives and Commitments***			
22	Schools and Government Program	6.8	5.1	5.1
23	Customer Sited Community Solar	2.9	1.5	1.5
24	EE/RE Integrated Pilot	1.5	.7	.7
25	EARN	0.5	0.3	0.3
26	***Total New Incentives and Commitments***	***$ 11.7***	***$ 7.6***	***$ 7.6***
27				
28	***Total Incentives & Commitments (line 19 + line 26)***	***$ 25.3***	***$ 21.2***	***$ 21.2***
29				
30	***Non-Incentive DE Costs***			
31	Administration	$ 2.2	$ 2.1	$ 2.1
32	Implementation	5.0	4.7	4.7
33	Information Technology	1.8	1.8	1.8
34	Renewable Energy Non-Incentive Costs	2.3	2.0	2.0
35	Advertising	0.7	0.2	0.2
36	***Total Non-Incentive DE Costs***	$ 12.0	$ 10.8	$ 10.8
37				
38	***Total Customer Sited DE (line 28 + line 36)***	***$ 37.3***	***$ 32.0***	***$ 32.0***
39				
40	*Research, Commercialization & Integration*	1.8	1.3	1.3
41				
42	**Base RES Budget (line 10 + line 38 + line 40)**	**$ 109.2**	**$ 101.7**	**$ 101.7**
43				
44	***Total RES Budget***			
45	Option 1 additions	$ 14.8	----	$ 19.0
46	**Base RES plus Option 1 total**	**$ 124.0**	----	**$ 120.7**
47	Option 2 additions	$ 32.0	----	----
48	**Base RES plus Option 2 total**	**$ 141.2**	----	----
49	Option 3 additions	$ 42.3	$ 30.0	----
50	**Base RES plus Option 3 total**	**$ 151.5**	**$ 131.7**	----

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Staff Recommendations

106. Staff has recommended that the Commission approve the Staff proposed Option A, reflecting a REST charge of $0.013861 per kWh, with monthly caps of $205.94 for non-residential customers, and $617.83 for non-residential customers with demands of 3 MW or greater. This includes a total budget of $131,700,000.

107. Staff has further recommended that the residential PV Up-Front Incentive be set at $0.85 per watt on January 1, 2012.

108. Staff has further recommended approval of the trigger mechanisms for reducing Photovoltaic up-front incentives as proposed by Staff.

109. Staff has further recommended that residential customers only be allowed to collect incentives up to 40 percent of the total system installed cost.

110. Staff has further recommended that the residential geothermal system incentive be set at $0.80 per kilowatt hour.

111. Staff has further recommended that the DE Program Element budgets be set at levels in Staff proposed Option A.

112. Staff has further recommended that the new home building incentive be set at $0.85 per watt.

113. Staff has further recommended that the non-residential Up-Front Incentive be set at $0.85/watt.

114. Staff has further recommended that the upper limit for non-residential Production Based Incentives be set at $0.084 per kWh for 10-year contracts, $0.082 per kWh for 15-year contracts, $0.08 per kWh for 20-year contracts and that customers shall only be allowed to collect up to 40 percent of the total system installed cost.

115. Staff has further recommended that the Rapid Reservation Program be eliminated since it is no longer needed.

116. Staff has further recommended that the APS proposal to install $600,000 in new meters be deleted from the REST Plan.

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117. Staff has further recommended that the Commission order the adoption by APS of the AriSEIA Security Deposit Proposal in lieu of the APS Security Deposit Proposal.

118. Staff has further recommended that the Commission order APS to evaluate the AriSEIA security deposit approach in 2012 and be prepared to make adjustments, if necessary, when the Commission considers the APS 2013 REST Plan.

119. Staff has further recommended approval of the other DE Program enhancements as discussed herein.

120. Staff has further recommended that third-party incentives for the Schools and Government Program be capped at \$0.12 per kilowatt hour for 15-year contracts and \$0.10 per kilowatt hour for 20-year contracts. Total incentives per project would be capped at 40 percent of total system installed cost. APS should change its project selection criteria to select the lowest-cost third-party incentive projects, similar to the existing non-residential PBI.

121. Staff has further recommended that in regard to the APS proposal to allow expansion of utility-owned Schools and Government projects, Staff recommends that APS be allowed to expand utility-owned projects by an additional 15 MW that would focus on the most economically challenged schools in all areas of APS' service territory.

122. Staff has further recommended approval of an additional 10 MW of third-party schools projects, but only if they are allocated by a least-cost method and subject to Staff's proposed incentive caps. Total incentives per third party project would be capped at 40 percent of the total system installed cost.

123. Staff has further recommended approval of the funding of the Integrated Pilot Program at a reduced budget level as discussed herein.

124. Staff has further recommended approval of Staff's proposed budget changes as discussed herein.

125. Staff has further recommended Commission approval for APS to build an additional 100 MW of utility-owned solar generation through the AzSun Program. The recovery mechanism would be the same as that for the first 100 MW phase.

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126. Staff has further recommended that the Commission approve APS' request to recover the revenue requirements of the Chino Valley Project through the RES adjustor. Staff recommends that the system start-up be delayed until September 30, 2012. Staff recommends that the revenue requirement for this project be set at $3.6 million in 2012.

127. Staff has further recommended that the Commission reduce the Research, Commercialization, and Integration budget by $500,000 from $1.8 million to $1.3 million.

128. Staff has further recommended approval of the proposed changes in the Customer Outreach, Marketing, and Partnership Development Programs.

129. Staff has further recommended approval of the amended Rate Rider Schedule SGSP.

130. Staff has further recommended approval of 25 MW of new utility-owned and operated renewable systems to be installed in the 2014 and 2015 timeframe.

131. Staff has further recommended that in future REST plans the burden of proof will be borne by APS to justify the use of ratepayer funds to pay for marketing and advertising if APS proposes to use ratepayer funds for marketing in future REST plans.

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

133. Staff has further recommended approval of the APS Adjustment Schedule RES as modified herein.

134. Staff has further recommended approval of the Renewable Energy Standard Adjustment Schedule Plan of Administration as modified herein.

135. Staff has further recommended that APS file tariffs in compliance with the Decision in this case within 15 days of the effective date of the Decision.

CONCLUSIONS OF LAW

1. Arizona Public Service Company is an Arizona public service corporation within the meaning of Article XV, Section 2, of the Arizona Constitution.

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2. The Commission has jurisdiction over APS and over the subject matter of the application.

3. The Commission, having reviewed the application and Staff's Memorandum dated October 25, 2011, concludes that it is in the public interest to approve the APS 2012 Renewable Energy Standard Implementation Plan and request for reset of renewable energy adjustor as discussed herein.

ORDER

IT IS THEREFORE ORDERED that Staff Option A is approved at a budget level of $131.7 million for the Arizona Public Service REST Implementation Plan.

IT IS FURTHER ORDERED that the RES Adjustor Rate for Arizona Public Service Company be reset to $0.013861 per kWh with monthly caps of $5.54 per month for residential customers, $205.94 per month for non-residential customers, and $617.83 per month for non-residential customers with demand of 3 MW or greater.

IT IS FURTHER ORDERED that the residential PV incentive shall be set at $0.85/watt starting January 1, 2012, and shall remain at that level unless 45 percent of the total $18,000,000 residential PV incentive is reserved on or before June 30, 2012. At that point, a trigger shall automatically reduce the incentive to $0.70/watt. The incentive shall remain at $0.70/watt unless 70 percent of the incentive total is reserved on or prior to September 30, 2012. At this trigger point, the incentive will drop to $0.50 per watt. A third trigger point shall be activated if 90 percent of the funding is reserved prior to November 30, 2012. The incentive shall drop to or remain at $0.50 per watt in that case. All cancellation funds shall be reallocated after all other funds are reserved and shall be reallocated at the incentive level in place when all other funds are reserved.

IT IS FURTHER ORDERED that Arizona Public Service Company shall post information on its own website, and on the ArizonaGoesSolar.org website at least every two weeks, regarding its progress toward reaching the triggers.

IT IS FURTHER ORDERED that residential customers shall only be allowed to collect incentives up to 40 percent of the total system installed cost.

IT IS FURTHER ORDERED that the residential geothermal system incentive be set at $0.80 per kilowatt hour.

IT IS FURTHER ORDERED that the DE Program Element budgets be set at levels in Staff proposed Option A.

IT IS FURTHER ORDERED that the new home building incentive be set at $0.85 per watt.

IT IS FURTHER ORDERED that the non-residential Up-Front Incentive be set at $0.85/watt.

IT IS FURTHER ORDERED that the upper limit for non-residential Production Based Incentives be set at $0.084 per kWh for 10 year contracts, $0.082 per kWh for 15 year contracts, $0.08 per kWh for 20-year contracts and that customers shall only be allowed to collect up to 40 percent of the total system installed cost.

IT IS FURTHER ORDERED that no funding be allocated to the Rapid Reservation Program.

IT IS FURTHER ORDERED that the Arizona Public Service Company proposal to install $600,000 in new meters be deleted from the REST Plan.

IT IS FURTHER ORDERED that Arizona Public Service Company shall adopt the AriSEIA Security Deposit Proposal in lieu of the Arizona Public Service Company Security Deposit Proposal.

IT IS FURTHER ORDERED that Arizona Public Service Company shall evaluate the effectiveness of the AriSEIA security deposit approach during 2012 and be prepared to discuss the necessity of adjustments to the approach when the Commission considers the Arizona Public Service Company 2013 REST Plan.

IT IS FURTHER ORDERED that the DE Program enhancements as discussed herein are approved.

IT IS FURTHER ORDERED that third-party incentives for the Schools and Government Program be capped at $0.12 per kilowatt hour for 15-year contracts and $0.10 per kilowatt hour for 20-year contracts. Total incentives per project shall be capped at 40 percent of total system installed cost. Arizona Public Service Company shall change its project selection criteria to select the lowest-cost third-party incentive projects, similar to the existing non-residential PBI program.

IT IS FURTHER ORDERED that Arizona Public Service Company be allowed to expand utility-owned projects by an additional 15 MW that would focus on economically challenged schools in all areas of Arizona Public Service Company's service territory.

IT IS FURTHER ORDERED that an additional 10 MW of third-party schools projects are approved, but only if they are allocated by a least-cost method and subject to Staff's proposed incentive caps. Total incentives per third party project shall be capped at 40 percent of the total system installed cost.

IT IS FURTHER ORDERED that the funding of the Integrated Pilot Program is approved at a budget level of $700,000 as discussed herein.

IT IS FURTHER ORDERED that Staff's proposed budget changes as discussed herein are approved.

IT IS FURTHER ORDERED that Arizona Public Service Company's request to build an additional 100 MW of utility-owned solar generation through the AzSun Program is approved. The recovery mechanism shall be the same as that for the first 100 MW phase.

IT IS FURTHER ORDERED that Arizona Public Service Company's request to recover the revenue requirements of the Chino Valley Project through the RES adjustor are approved with the system start-up being delayed until September 30, 2012, and the revenue requirement for this project being set at $3.6 million in 2012.

IT IS FURTHER ORDERED that the Research, Commercialization, and Integration budget shall be limited to $1.3 million.

IT IS FURTHER ORDERED that the proposed changes in the Customer Outreach, Marketing, and Partnership Development Programs are approved.

IT IS FURTHER ORDERED that the amended Rate Rider Schedule SGSP is approved as discussed herein.

IT IS FURTHER ORDERED that 25 MW of new utility-owned and operated renewable systems is approved to be installed in the 2014 and 2015 timeframe.

IT IS FURTHER ORDERED that in future REST plans the burden of proof will be borne by Arizona Public Service Company to justify the use of ratepayer funds to pay for marketing and advertising if Arizona Public Service Company proposes to use ratepayer funds for marketing in future REST plans.

IT IS FURTHER ORDERED that the formation of the REST Format Working Group as discussed herein is approved. Arizona Public Service Company shall submit the Working Group's report and recommendations by September 1, 2012, for Staff approval.

IT IS FURTHER ORDERED that the Arizona Public Service Company Adjustment Schedule RES as modified herein is approved.

IT IS FURTHER ORDERED that the Renewable Energy Standard Adjustment Schedule Plan of Administration as modified herein is approved.

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IT IS FURTHER ORDERED that Arizona Public Service Company file tariffs in compliance 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 ______________________, 2011.

____
ERNEST G. JOHNSON
EXECUTIVE DIRECTOR

DISSENT: ________________________

DISSENT: ________________________

SMO:RTW:lhm\MAS

SERVICE LIST FOR: Arizona Public Service Company
DOCKET NO. E-01345A-11-0264

Ms. Deborah R. Scott
Pinnacle West Capital Corporation
Post Office Box 53999, MS 8695
400 North Fifth Street
Phoenix, Arizona 85072-3999

Mr. Scott S. Wakefield
Ridenour, Hienton & Lewis, PLLC
201 North Central Avenue, Suite 3300
Phoenix, Arizona 85004-1052

Mr. Court S. Rich
Mr. M. Ryan Hurley
Rose Law Group, PC
6613 North Scottsdale Road, Suite 200
Scottsdale, Arizona 85250

Mr. C. Webb Crockett
Mr. Patrick J. Black
Fennemore Craig, PC
3003 North Central Avenue, Suite 2600
Phoenix, Arizona 85012-2913

Mr. Daniel W. Pozefsky
Chief Counsel
RUCO
1110 West Washington Street, Suite 220
Phoenix, Arizona 85007

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

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