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| | |
|---|---|
| IN THE MATTER OF THE APPLICATION OF ARIZONA PUBLIC SERVICE COMPANY FOR APPROVAL OF ITS 2012 RENEWABLE ENERGY STANDARD IMPLEMENTATION PLAN AND REQUEST FOR RESET OF RENEWABLE ENERGY ADJUSTOR | DOCKET NO. E-01345A-11-0264<br><br>**SUPPLEMENTAL FILING &**<br><br>**NOTICE OF ERRATA** |

Arizona Public Service Company (APS or Company) submits this filing to update certain numbers in its July 1, 2011 Renewable Energy Standard Implementation Plan (RES Plan) arising out of the Commission's recent decision to approve APS's Application to Modify Residential Incentives in Docket Nos. E-01345A-10-0262 and E-01345A-10-0166.

In addition, APS submits this Notice of Errata to correct certain data entries in its RES Plan that resulted from inadvertent transpositions and rounding errors. These discrepancies are relevant to a limited number of exhibits and did not affect the 2012 budget. This filing includes the entire series of plan exhibits—with any changes highlighted in yellow—and replaces the original materials in total.

## I. SUPPLEMENTAL FILING

APS structured its original 2012 RES Plan assuming that it would continue $1.45/watt incentives after October 1, 2011 under its 2011 RES Plan. With the Commission's recent decision regarding the $1/watt incentive, APS will now offer only $1/watt for residential photovoltaic incentives out of the amounts remaining in APS's 2011 RES budget. The new incentive level affects Option 1 and Options 2 and 3 differently.

The $1/watt residential incentive changes Option 1 by reducing the total dollar amount required under Option 1 to achieve compliance in 2012 by approximately $5 million. Option 1 reflects the minimum budget necessary to achieve compliance under both the Commission's RES rules and the Company's most recent rate case settlement (Decision No. 71448, dated December 30, 2009). The $1/watt residential incentive will permit APS to reserve more residential DE projects in the fourth quarter of 2011 than originally contemplated. This increased number of reservations will move APS closer to complying with 2012 energy production requirements. As a result, it will cost APS approximately $5 million less to achieve the strict compliance contemplated by Option 1. The budgetary change also requires a revision to the Company's proposed Renewable Energy Standard Adjustment Schedule, RES-1, for Option 1 as originally filed. Attachment 1 reflects the revised RES-1.

Whereas Option 1 reflects strict compliance with MWh compliance targets, Options 2 and 3 are driven by the dollars budgeted for DE and PPA projects. Therefore, the $1/watt residential incentive did not change the budgets for these two options. Because the $1/watt incentive will result in the installation of more residential DE projects in 2012, however, this Supplemental Filing adds to the total projected MWh that Options 2 and 3 will achieve.

The attached Exhibits reflect all changes resulting from the use of a $1/watt incentive through the rest of 2011 and are highlighted for clarity.

## II. NOTICE OF ERRATA

The errata are as follows:

- Page 13, line 6 of APS's Application. This line currently states: "APS has 227 megawatts of existing capacity in its renewable generation portfolio…." It should state: "APS has *233* megawatts of existing capacity in its renewable generation portfolio…." The 227 number referred only to third-party owned capacity. Including utility owned capacity increases the number to 233.
- Page 13, lines 11-12 of APS's Application. These lines currently state that the additions proposed in the 2012 Plan will result in a total APS renewable generation portfolio of 886 megawatts, of which 78% is third-party owned and financed and 26%

is APS-owned. These lines, however, should instead state that the total capacity under proposed Option 2 is 756 megawatts, of which 79% is third-party owned and financed and 21% is APS-owned.

- Page 14, line 20 of APS's Application. This line currently contains the number $3.5 million. The digits were transposed, however, and should read $5.3 million.

As noted before, none of these errata change the overall budgetary numbers that appeared in APS's original 2012 RES Plan.

In addition to these errata, the exhibits attached to the RES Plan contain a handful of additional numbers that were truncated during the calculation process rather than rounded as originally intended. This created a few minor inconsistencies within these exhibits. For illustrative purposes only, a number such as 2.3567 automatically became 2.3. These inconsistencies have been corrected and highlighted. The revised exhibits with highlights showing changes for both the reduction in residential DE incentives and the rounding corrections are attached as Attachment 2.

RESPECTFULLY SUBMITTED this 21st day of September, 2011.

By: _____
Thomas A. Loquvam
Attorney for Arizona Public Service Company

ORIGINAL and thirteen (13) copies of the foregoing filed this 21st day of September, 2011, with:

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# ATTACHMENT 1

# ADJUSTMENT SCHEDULE RES
# RENEWABLE ENERGY STANDARD

## APPLICATION

The Renewable Energy Standard ("RES") Adjustor shall apply to all retail Standard Offer or Direct Access service, excluding kWh served in accordance with rate schedules Solar-2, Solar-3, and Adjustment Schedules GPS-1, GPS-2, and GPS-3. All provisions of the customer's current applicable rate schedule will apply in addition to the RES Adjustor. From time to time, the RES program spending requirements will be evaluated and if necessary the charge and/or caps may be modified by the Commission. Any new charges/caps will be applied in billing cycle 1 beginning in the month following Commission approval and will not be prorated. Details regarding the administration of this Adjustor can be found in the Company's Renewable Energy Standard Adjustment Schedule Plan of Administration. The RES Adjustor and the Demand Side Management Adjustor may be combined on the customer's bill and shown on the "Environmental Benefits Surcharge" line.

## RATES

The bill shall be calculated at the following rates:

| | | |
|---|---|---|
| All kWh | $0.013013 | per kWh |

## SURCHARGE LIMITS

The monthly total of the Renewable Energy Standard Adjustment Charge shall not exceed the following limits:

| | | |
|---|---|---|
| Residential Customers | $5.21 | per service per month |
| Non-residential Customers | $193.33 | per service per month |
| Non-residential Customers with demand of 3,000 kW or higher per month for three consecutive months | $579.99 | per service per month |

# ADJUSTMENT SCHEDULE RES
# RENEWABLE ENERGY STANDARD

## APPLICATION

The Renewable Energy Standard ("RES") Adjustor shall apply to all retail Standard Offer or Direct Access service, excluding kWh served in accordance with rate schedules Solar-2, Solar-3, and Adjustment Schedules GPS-1, GPS-2, and GPS-3. All provisions of the customer's current applicable rate schedule will apply in addition to the RES Adjustor. From time to time, the RES program spending requirements will be evaluated and if necessary the charge and/or caps may be modified by the Commission. Any new charges/caps will be applied in billing cycle 1 beginning in the month following Commission approval ~~in A.C.C. Decision No. 70654~~ and will not be prorated. Details regarding the administration of this Adjustor can be found in ~~A.A.C. R14-2-1808~~the Company's Renewable Energy Standard Adjustment Schedule Plan of Administration. The RES Adjustor and the Demand Side Management Adjustor may be combined on the customer's bill and shown on the "Environmental Benefits Surcharge" line.

## RATES

The bill shall be calculated at the following rates:

| | | |
|---|---|---|
| All kWh | $~~0.010132~~0.013013 | per kWh |

## SURCHARGE LIMITS

The monthly total of the Renewable Energy Standard Adjustment Charge shall not exceed the following limits:

| | | |
|---|---|---|
| Residential Customers | $~~4.05~~5.21 | per service per month |
| Non-residential Customers | $~~150.53~~193.33 | per service per month |
| Non-residential Customers with demand of 3,000 kW or higher per month for three consecutive months | $~~451.60~~579.99 | per service per month |

# ATTACHMENT 2

# EXHIBIT 1

# RES Plan and Program Summary

**REVISED** Exhibit 1A summarizes the RES Implementation Plan objectives and outcomes.

> Please note: Exhibit 1A has been revised to reflect the Commission's recent decision allowing APS to modify its residential DE incentive level to $1.00/watt for all photovoltaic systems through the end of the calendar year 2011 (Decision No. 72592 dated September 15, 2011). This modification impacts the Company's three proposed options as follows:
>
> Option 1. Option 1 reflects the minimum budget necessary to achieve compliance under both the Commission's RES rules and the Company's most recent rate case settlement (Decision No. 71448 dated December 30, 2009). Residential DE projects reserved in the fourth quarter of 2011 over and above the originally budgeted number of projects (due to the lower incentive) are expected to be installed in 2012, thus increasing the MWh APS can claim for 2012 compliance. Therefore, meeting compliance in 2012 will be less costly than originally projected in the Company's originally filed 2012 RES IP by approximately $5 million.
>
> Options 2 and 3. Both Options 2 and 3 are driven by the dollars budgeted for DE and PPA projects, not by MWh compliance targets as both options are above compliance. Therefore, budgets were kept static for these two options, and the MWh reflecting additional residential DE projects installed in 2012 due to the $1.00/watt incentive change are simply added to the total projected MWH achieved.

**REVISED** Exhibit 1B outlines the annual APS renewable energy targets by renewable generation and distributed energy, anticipated needs, and summarizes the proposed budget.

Exhibit 1C is a graphic representation of the renewable generation and distributed energy components of the RES portfolio for 2012 through 2016.

Exhibit 1D is a detailed graphic representation of the residential distributed energy component of the RES portfolio for 2012 through 2016.

Exhibit 1E is a detailed graphic representation of the non-residential distributed energy component of the RES portfolio for 2012 through 2016.

## REVISED Exhibit 1A: APS RES Implementation Plan 2012 Overview

| 2012 RES IP Objectives | > Funding necessary for existing program and contract commitments<br>> Budget required to achieve compliance with the 2012 RES rules<br>> Program approvals necessary to achieve 2009 Settlement Agreement requirement |
|---|---|

| 2012 RES Expected Production | RES Requirement (in MWh) | Option 1 MWh | Option 2 MWh | Option 3 MWh |
|---|---|---|---|---|
| Total RG Production | 690,475 | 1,207,185 | 1,207,185 | 1,207,185 |
| DE Production: | | | | |
| *Residential DE* | 147,959 | 148,861 | 170,137 | 184,497 |
| *Non-residential DE* | 118,367 | 151,182 | 154,235 | 164,223 |
| *Wholesale DE* | 29,592 | 42,360 | 42,360 | 42,360 |
| Total DE Production | 295,918 | 342,403 | 366,732 | 391,080 |
| *Less Green Choice Sales* | | *(150,000)* | *(150,000)* | *(150,000)* |
| | **986,393** | **1,399,588** | **1,423,917** | **1,448,265** |

| 2012 RES Budget | | | $M | $M | $M |
|---|---|---|---|---|---|
| **Base** | Renewable Generation | | $ 66.9 | $ 66.9 | $ 66.9 |
| | DE Contracts - Incentives | | 25.3 | 25.3 | 25.3 |
| | Program Costs | | 15.2 | 15.2 | 15.2 |
| | Research, Commercialization, and Integration | | 1.8 | 1.8 | 1.8 |
| **Options** | Residential DE | | 14.8 | 29.9 | 40.0 |
| | Non-residential DE | | - | 2.1 | 2.3 |
| | Renewable Generation [1] | | - | - | - |
| | **Total RES Budget** | | **$ 124.0** | **$ 141.2** | **$ 151.5** |

| 2012 RES Adjustor Rate Schedule & Monthly Caps | 2011 RES Adjustor | $/bill | $/bill | $/bill |
|---|---|---|---|---|
| *per kWh* | *$ 0.010132* | $ 0.013013 | $ 0.014907 | $ 0.016037 |
| *Residential customer cap* | *$ 4.05* | $ 5.21 | $ 5.96 | $ 6.41 |
| *Non-residential (under 3 MW) customer cap* | *$ 128.70* | $ 193.33 | $ 221.47 | $ 238.27 |
| *Non-residential (3 MW and over) customer cap* | *$ 386.10* | $ 579.99 | $ 664.40 | $ 714.81 |

[1] Whereas each option (1-3) does include an amount for renewable generation but in 2012 that amount is equal to zero.

## REVISED Exhibit 1B: APS 2012 - 2016 RES Program Summary

| Line No. | APS RES Targets (MWh) | 2012 | 2013 | 2014 | 2015 | 2016 | Line No. |
|---|---|---|---|---|---|---|---|
| 1 | | | | | | | 1 |
| 2 | APS Estimated Retail Sales | 28,182,659 | 28,398,617 | 29,001,086 | 29,540,571 | 30,192,571 | 2 |
| 3 | APS RES Target - % of Retail Sales | 3.50% | 4.00% | 4.50% | 5.00% | 6.00% | 3 |
| 4 | **APS Total RES Requirement** | **986,393** | **1,135,945** | **1,305,049** | **1,477,029** | **1,811,554** | 4 |
| 5 | | | | | | | 5 |
| 6 | **RES Generation Target** | **690,475** | **795,161** | **913,534** | **1,033,920** | **1,268,088** | 6 |
| 7 | | | | | | | 7 |
| 8 | Distributed Energy % of RES Requirement | 30% | 30% | 30% | 30% | 30% | 8 |
| 9 | **Distributed Energy Requirement** | **295,918** | **340,784** | **391,515** | **443,109** | **543,466** | 9 |
| 10 | Residential Distributed Energy (50%) | 147,959 | 170,392 | 195,758 | 221,555 | 271,733 | 10 |
| 11 | Non-Residential Distributed Energy (40%) | 118,367 | 136,314 | 156,606 | 177,244 | 217,386 | 11 |
| 12 | Wholesale Distributed Energy (10%) | 29,592 | 34,078 | 39,151 | 44,310 | 54,347 | 12 |
| 13 | | | | | | | 13 |
| 14 | **Renewable Generation (MWh)** | | | | | | 14 |
| 15 | | 2012 | 2013 | 2014 | 2015 | 2016 | 15 |
| 16 | RES Generation Target | 690,475 | 795,161 | 913,534 | 1,033,920 | 1,268,088 | 16 |
| 17 | | | | | | | 17 |
| 18 | Existing/Planned Generation Owned/Contracted | 1,207,185 | 1,655,052 | 2,451,813 | 2,581,206 | 2,602,973 | 18 |
| 19 | *Planned Renewable Generation Option 1* [1] | - | - | - | 258,420 | 258,420 | 19 |
| 20 | *Planned Renewable Generation Option 2* [1] | - | - | - | 216,504 | 216,504 | 20 |
| 21 | *Planned Renewable Generation Option 3* [1] | - | - | - | 148,920 | 148,920 | 21 |
| 22 | Projected Green Power Sales [2] | 150,000 | 150,000 | 150,000 | 150,000 | 150,000 | 22 |
| 23 | Total RES Generation Option 1 | 1,057,185 | 1,505,052 | 2,301,813 | 2,689,626 | 2,711,393 | 23 |
| 24 | Total RES Generation Option 2 | 1,057,185 | 1,505,052 | 2,301,813 | 2,647,710 | 2,669,477 | 24 |
| 25 | Total RES Generation Option 3 | 1,057,185 | 1,505,052 | 2,301,813 | 2,580,126 | 2,601,893 | 25 |
| 26 | **Energy Applied To/(Withdrawn From) APS Bank for RES [3]** | **366,710** | **709,891** | **1,388,279** | **1,613,790** | **1,401,389** | 26 |
| 27 | **(line 24 - line 16)** | | | | | | 27 |
| 28 | **Distributed Energy (MWh)** | | | | | | 28 |
| 29 | | 2012 | 2013 | 2014 | 2015 | 2016 | 29 |
| 30 | RES Distributed Energy Target | 295,918 | 340,784 | 391,515 | 443,109 | 543,466 | 30 |
| 31 | | | | | | | 31 |
| 32 | Estimated Existing Distributed Energy [4] | 279,027 | 341,754 | 384,775 | 414,569 | 414,005 | 32 |
| 33 | *Planned Distributed Energy Option 1* [5] | 21,016 | 43,449 | 68,814 | 94,611 | 144,790 | 33 |
| 34 | *Planned Distributed Energy Option 2* [6] | 45,345 | 90,833 | 131,216 | 174,314 | 219,149 | 34 |
| 35 | *Planned Distributed Energy Option 3* [7] | 69,692 | 151,450 | 227,040 | 298,341 | 352,994 | 35 |
| 36 | Wholesale [8] | 42,360 | 50,721 | 60,549 | 64,103 | 70,112 | 36 |
| 37 | APS Customer Sited Community Solar [10] | 13,926 | 48,539 | 86,418 | 108,477 | 119,506 | 37 |
| 38 | Total Distributed Energy Option 1 [4] | 356,329 | 484,463 | 600,556 | 681,760 | 748,413 | 38 |
| 39 | Total Distributed Energy Option 2 [5] | 380,658 | 531,847 | 662,958 | 761,463 | 822,772 | 39 |
| 40 | Total Distributed Energy Option 3 [6] | 405,005 | 592,464 | 758,782 | 885,490 | 956,617 | 40 |
| 41 | | | | | | | 41 |
| 42 | **Energy Applied To/(Withdrawn From) APS Bank for RES [3]** | **84,740** | **191,063** | **271,443** | **318,354** | **279,306** | 42 |
| 43 | **(line 39 - line 30)** | | | | | | 43 |
| 44 | **APS RES Budget Summary ($ MM) [9]** | | | | | | 44 |
| 45 | | 2012 | 2013 | 2014 | 2015 | 2016 | 45 |
| 46 | Total Renewable Generation | $ 70.1 | $ 47.0 | $ 105.9 | $ 85.5 | $ 91.9 | 46 |
| 47 | Total Distributed Energy | $ 37.3 | $ 53.2 | $ 67.1 | $ 55.8 | $ 59.2 | 47 |
| 48 | Research, Commercialization, & Integration | $ 1.8 | $ 1.5 | $ 1.5 | $ 1.5 | $ 1.5 | 48 |
| 49 | Base RES Program Budget | $ 109.2 | $ 101.7 | $ 174.5 | $ 142.8 | $ 152.6 | 49 |
| 50 | Option 1 Addition | $ 14.8 | $ 13.7 | $ 14.8 | $ 21.5 | $ 32.3 | 50 |
| 51 | **RES Option 1 Budget (Line 49 + Line 50)** | **$ 124.0** | **$ 115.4** | **$ 189.3** | **$ 164.3** | **$ 184.9** | 51 |
| 52 | Option 2 Addition | $ 32.0 | $ 23.0 | $ 19.3 | $ 27.0 | $ 28.1 | 52 |
| 53 | **RES Option 2 Budget (Line 49 + Line 52)** | **$ 141.2** | **$ 124.7** | **$ 193.8** | **$ 169.8** | **$ 180.7** | 53 |
| 54 | Option 3 Addition | $ 42.3 | $ 39.5 | $ 36.8 | $ 38.6 | $ 35.8 | 54 |
| 55 | **RES Option 3 Budget (Line 49 + Line 54)** | **$ 151.5** | **$ 141.2** | **$ 211.3** | **$ 181.4** | **$ 188.4** | 55 |

**Notes:**

[1] Renewable Generation option capacity as described in Exhibit 2B and the 3 series of exhibits.

[2] The Green Choice (Rate Schedules GPS-1, GPS-2, GPS-3, Solar-3) sales are included only for procurement purposes. APS intends to procure enough energy to achieve RES compliance and to provide for Green Power purchased by customers. Green Power sold to customers will not be counted towards RES compliance and the cost of those resources is not included in the Renewable Generation budget (per ACC Decision No. 70313).

[3] Assumes Option 2.

[4] The estimated existing Distributed Energy is the projected DE expected to be in service at the end of 2011 estimated at the time of the filing.

[5] Distributed Energy Option 1 includes residential UFI program expansion to precisely meet RES residential DE compliance only.

[6] Distributed Energy Option 2 includes residential UFI program expansion to meet and slightly exceed RES residential DE compliance as well as a $2M annual expansion of the non-res UFI PBI program expansion and a PBI program expansion for medium sized commercial projects totaling to 25MW over the term of this plan.

[7] Distributed Energy Option 3 includes residential UFI program expansion to meet and exceed RES residential DE compliance as ordered in ACC Decision No. 72022 as well as a $2M annual expansion of the non-res UFI PBI program expansion, 50MW of commercial sized projects over the term of this plan.

[8] This line item is made up of the Distributed Energy portion of the project (Snowflake White Mountain Power) that is split between Renewable Generation (RG) and Wholesale Distributed Energy (DE). The split is based on the amount of the wholesale DE component allowed in a given year.

[9] Assumes rate case adjudication in 2012 and 2014.

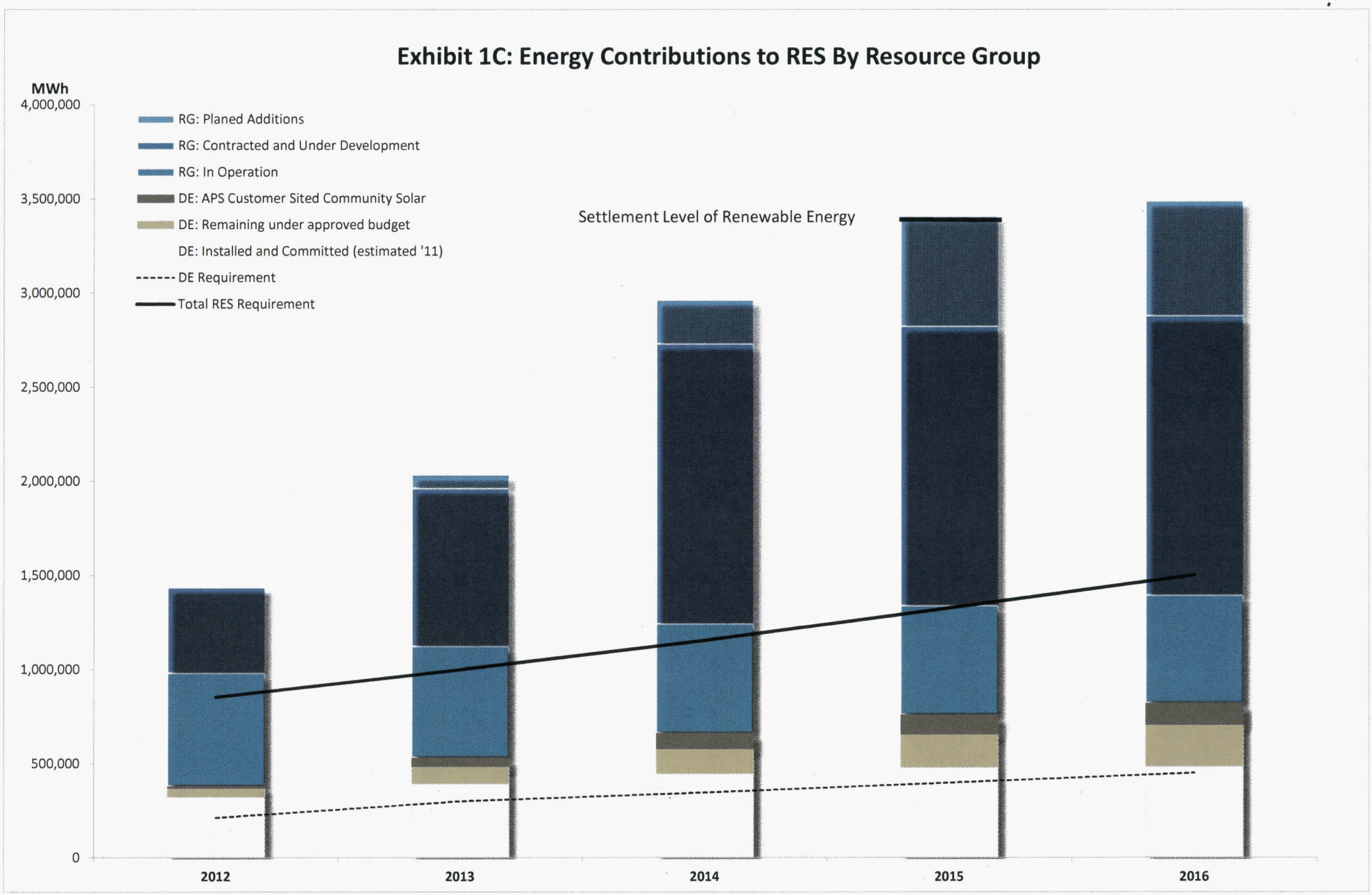
Exhibit 1C: Energy Contributions to RES By Resource Group
MWh
4,000,000
3,500,000
3,000,000
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
RG: Planed Additions
RG: Contracted and Under Development
RG: In Operation
DE: APS Customer Sited Community Solar
DE: Remaining under approved budget
DE: Installed and Committed (estimated '11)
DE Requirement
Total RES Requirement
Settlement Level of Renewable Energy
2012
2013
2014
2015
2016

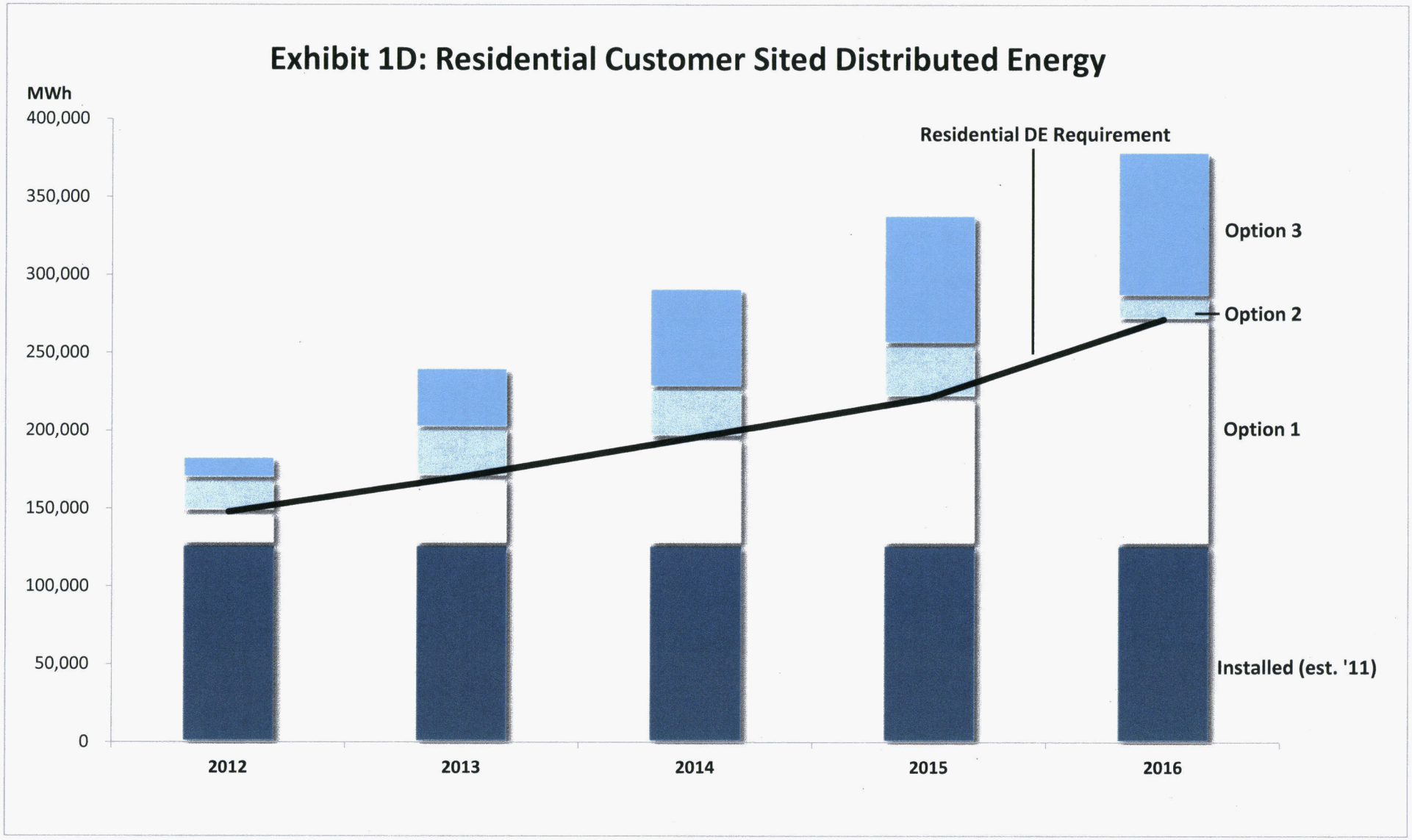
Exhibit 1D: Residential Customer Sited Distributed Energy
MWh
400,000
350,000
300,000
250,000
200,000
150,000
100,000
50,000
0
Residential DE Requirement
Option 3
Option 2
Option 1
Installed (est. '11)
2012
2013
2014
2015
2016

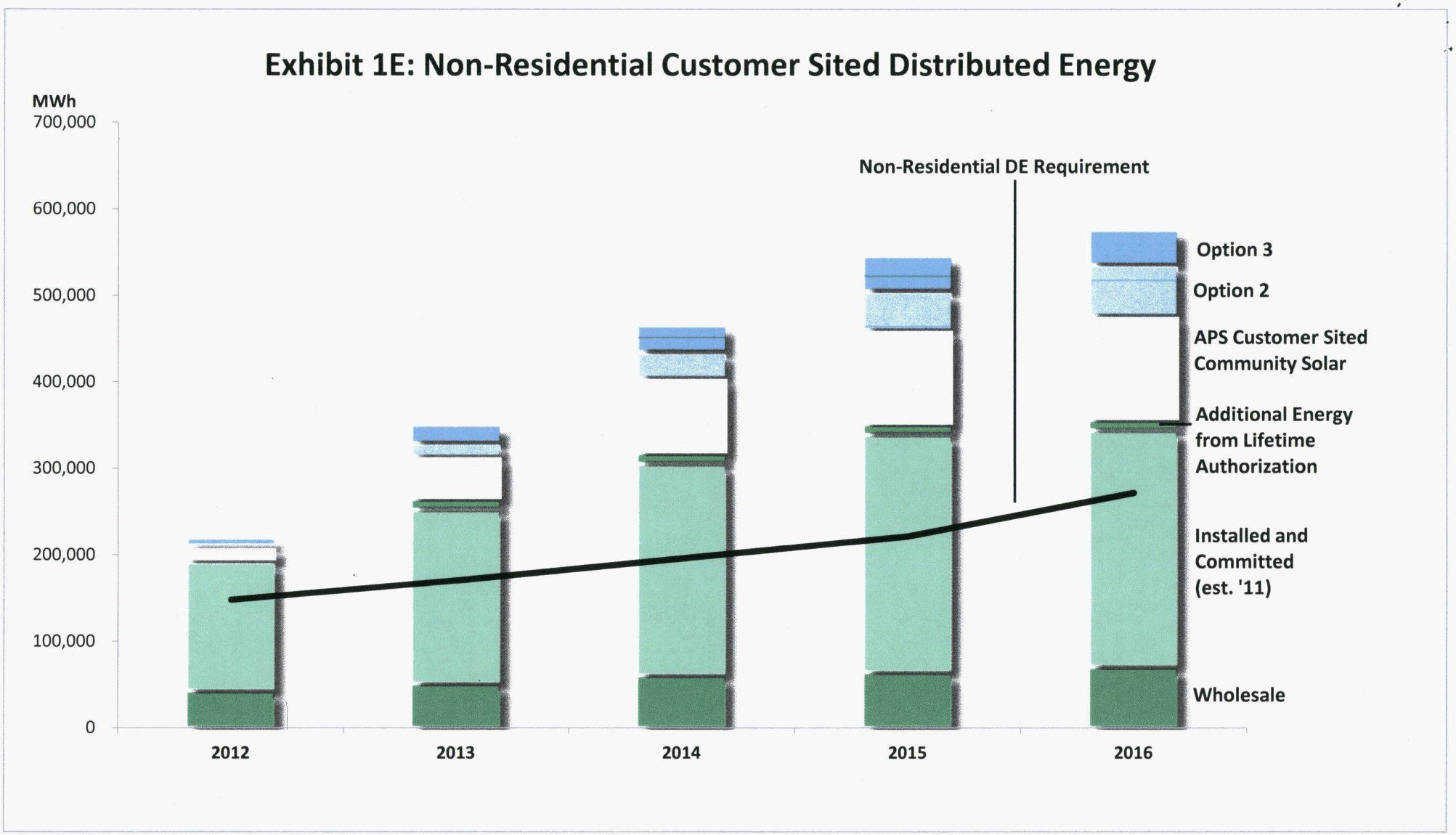
Exhibit 1E: Non-Residential Customer Sited Distributed Energy
MWh
700,000
600,000
500,000
400,000
300,000
200,000
100,000
0
2012
2013
2014
2015
2016
Non-Residential DE Requirement
Option 3
Option 2
APS Customer Sited Community Solar
Additional Energy from Lifetime Authorization
Installed and Committed (est. '11)
Wholesale

# Exhibit 2

# RES Budget Detail

**REVISED** Exhibit 2A details the proposed RES budget for the 2012 through 2016 program by line item for both renewable generation and for distributed energy.

**REVISED** Exhibit 2B details each of the Company's proposed budget options (Option 1, Option 2, and Option 3).

## REVISED Exhibit 2A: APS 2012 - 2016 RES Budget Summary (in $M's)

| Line No. | | 2012 | 2013 | 2014 | 2015 | 2016 | Total | Line No. |
|---|---|---|---|---|---|---|---|---|
| 1 | **Renewable Generation** | | | | | | | 1 |
| 2 | ***Renewable Generation Contracts and Operation and Maintenance*** | | | | | | | 2 |
| 3 | Purchases and Generation [1] | $ 67.5 | $ 46.0 | $ 104.8 | $ 84.3 | $ 90.6 | $ 393.2 | 3 |
| 4 | Administration | 1.9 | 2.0 | 2.0 | 2.1 | 2.1 | 10.1 | 4 |
| 5 | Implementation | 1.3 | 1.3 | 1.4 | 1.4 | 1.5 | 6.9 | 5 |
| 6 | ***Total RG Contracts and O/M*** | ***$ 70.7*** | ***$ 49.3*** | ***$ 108.2*** | ***$ 87.8*** | ***$ 94.2*** | ***$ 410.2*** | 6 |
| 7 | ***Offsets*** | | | | | | | 7 |
| 8 | Estimated Green Choice Revenue Credit | $ (0.6) | $ (2.3) | $ (2.3) | $ (2.3) | $ (2.3) | $ (9.8) | 8 |
| 9 | | | | | | | | 9 |
| 10 | ***Total Renewable Generation*** *(line 6 + line 8)* | ***$ 70.1*** | ***$ 47.0*** | ***$ 105.9*** | ***$ 85.5*** | ***$ 91.9*** | ***$ 400.4*** | 10 |
| 11 | | | | | | | | 11 |
| 12 | **Customer Sited Distributed Energy** | | | | | | | 12 |
| 13 | ***Existing Contracts and Commitments*** | | | | | | | 13 |
| 14 | DE RFP | $ 4.9 | $ 7.4 | $ 9.6 | $ 9.7 | $ 9.6 | $ 41.2 | 14 |
| 15 | Innovative Technologies [2] | 0.2 | 1.3 | 1.3 | 1.3 | 1.3 | 5.4 | 15 |
| 16 | Production-based Incentives (Existing) | 7.9 | 13.3 | 14.1 | 14.1 | 14.1 | 63.5 | 16 |
| 17 | Flagstaff CPP | 0.4 | 0.2 | - | - | - | 0.6 | 17 |
| 18 | Wholesale DE [3] | 0.2 | 0.2 | 0.4 | 0.5 | 0.7 | 2.0 | 18 |
| 19 | ***Total Existing Contracts and Commitments*** | ***$ 13.6*** | ***$ 22.4*** | ***$ 25.4*** | ***$ 25.6*** | ***$ 25.7*** | ***$ 112.7*** | 19 |
| 20 | | | | | | | | 20 |
| 21 | ***New Incentives and Commitments*** | | | | | | | 21 |
| 22 | Schools and Government Program [4] | 6.8 | 7.1 | 11.4 | 10.0 | 9.6 | 44.9 | 22 |
| 23 | APS Customer Sited Community Solar [5] | 2.9 | 11.2 | 18.3 | 8.3 | 11.9 | 52.6 | 23 |
| 24 | EE/RE Integrated Pilot [6] | 1.5 | - | - | - | - | 1.5 | 24 |
| 25 | Energy Assistance for Renewable Neighborhoods | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 2.5 | 25 |
| 26 | ***Total New Incentives and Commitments*** | ***$ 11.7*** | ***$ 18.8*** | ***$ 30.2*** | ***$ 18.8*** | ***$ 22.0*** | ***$ 101.5*** | 26 |
| 27 | | | | | | | | 27 |
| 28 | ***Total Incentives and Commitments*** *(line 19 + line 26)* | ***$ 25.3*** | ***$ 41.2*** | ***$ 55.6*** | ***$ 44.4*** | ***$ 47.7*** | ***$ 214.2*** | 28 |
| 29 | | | | | | | | 29 |
| 30 | ***Non-Incentive Distributed Energy Costs*** | | | | | | | 30 |
| 31 | Administration | $ 2.2 | $ 2.2 | $ 2.3 | $ 2.3 | $ 2.4 | $ 11.4 | 31 |
| 32 | Implementation [7] | 5.0 | 5.3 | 5.2 | 5.1 | 5.1 | 25.7 | 32 |
| 33 | Information Technology | 1.8 | 1.5 | 1.0 | 1.0 | 1.0 | 6.3 | 33 |
| 34 | Renewable Energy Incentive Program Non-Incentive Costs | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 11.5 | 34 |
| 35 | Advertising | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 3.5 | 35 |
| 36 | ***Total Non-Incentive DE Costs*** | $ 12.0 | $ 12.0 | $ 11.5 | $ 11.4 | $ 11.5 | $ 58.4 | 36 |
| 37 | | | | | | | | 37 |
| 38 | ***Total Customer Sited DE*** *(line 28 + line 36)* | ***$ 37.3*** | ***$ 53.2*** | ***$ 67.1*** | ***$ 55.8*** | ***$ 59.2*** | ***$ 272.6*** | 38 |
| 39 | | | | | | | | 39 |
| 40 | *Research, Commercialization, & Integration* | *$ 1.8* | *$ 1.5* | *$ 1.5* | *$ 1.5* | *$ 1.5* | *$ 7.8* | 40 |
| 41 | | | | | | | | 41 |
| 42 | **Base RES Budget** (line 10 + line 38 + line 40) | **$ 109.2** | **$ 101.7** | **$ 174.5** | **$ 142.8** | **$ 152.6** | **$ 680.8** | 42 |
| 43 | | | | | | | | 43 |
| 44 | ***Total RES Budget*** [9] | | | | | | | 44 |
| 45 | Option 1 additions [8] | $ 14.8 | $ 13.7 | $ 14.8 | $ 21.5 | $ 32.3 | $ 97.1 | 45 |
| 46 | **Base RES plus Option 1 total** | **$ 124.0** | **$ 115.4** | **$ 189.3** | **$ 164.3** | **$ 184.9** | **$ 777.9** | 46 |
| 47 | Option 2 additions [8] | $ 32.0 | $ 23.0 | $ 19.3 | $ 27.0 | $ 28.1 | $ 129.4 | 47 |
| 48 | **Base RES plus Option 2 total** | **$ 141.2** | **$ 124.7** | **$ 193.8** | **$ 169.8** | **$ 180.7** | **$ 810.2** | 48 |
| 49 | Option 3 additions [8] | $ 42.3 | $ 39.5 | $ 36.8 | $ 38.6 | $ 35.8 | $ 193.0 | 49 |
| 50 | **Base RES plus Option 3 total** | **$ 151.5** | **$ 141.2** | **$ 211.3** | **$ 181.4** | **$ 188.4** | **$ 873.8** | 50 |

**Notes:**

[1] Includes AZ Sun program. For additional detail refer to Exhibits 3A and 3E.

[2] Assumes resources deployed in Nov. 2012. Utilizes funds authorized under the DE RFP.

[3] Includes costs from Snowflake White Mountain Power which is split between Renewable Generation (RG) and Distributed Energy (DE). The split is based on the amount of the wholesale DE component allowed in a given year.

[4] The Schools and Government Program as approved in ACC Decision No. 72174.

[5] Represents the expansion of both the 2012 Schools and Government Program and future customer sited community solar.

[6] *This program represents a shared effort between energy efficiency, smart grid and renewable energy for the installation of smart invertors and in-home solar production displays. Costs represents programmatic expenses and capital deployment revenue requirement.*

[7] Includes metering initiative capital revenue requirement. DE Implementation costs assume meter sets associated with Option 2, this will vary approximately -/+ $300k for Option 1 or Option

[8] For optionality detail please refer to Exhibit 2B.

[9] Assumes rate case adjudication in 2012 and 2014.

## REVISED Exhibit 2B: APS 2012 RES IP - Optionality Detail

### Option 1

| Line No. | Energy (in MWh) | 2012 | 2013 | 2014 | 2015 | 2016 | Total |
|---|---|---|---|---|---|---|---|
| 1 | Renewable Generation [1] | - | - | - | 258,420 | 258,420 | 516,840 |
| 2 | Residential Distributed Energy UFI | 21,016 | 43,449 | 68,814 | 94,611 | 144,790 | 372,680 |
| 3 | **Total Energy** | **21,016** | **43,449** | **68,814** | **353,031** | **403,210** | **889,520** |
| 4 | | | | | | | |
| 5 | **Expense (in $M)** | | | | | | |
| 6 | Renewable Generation [1] | $ - | $ - | $ - | $ 7.7 | $ 7.8 | $ 15.5 |
| 7 | Residential Distributed Energy UFI | 14.8 | 13.7 | 14.8 | 13.8 | 24.5 | 81.6 |
| 8 | **Total Expense** | **$ 14.8** | **$ 13.7** | **$ 14.8** | **$ 21.5** | **$ 32.3** | **$ 97.1** |

9 **Option 1 Notes:**

10 - Option 1 consists of an additional 118 MW of a utility scale renewable generation PPA (expressed in PV equivalency) and residential DE full compliance.
- These amounts would be $300k less to capture the payroll associated with the volumetric decrease in meter sets.

11

### Option 2

| Line No. | Energy (in MWh) | 2012 | 2013 | 2014 | 2015 | 2016 | Total |
|---|---|---|---|---|---|---|---|
| 13 | Renewable Generation [1] | - | - | - | 216,504 | 216,504 | 433,008 |
| 14 | Residential Distributed Energy UFI | 42,292 | 75,128 | 100,775 | 128,742 | 159,487 | 506,424 |
| 15 | Non-Residential Distributed Energy UFI | 2,011 | 4,247 | 6,483 | 9,114 | 11,745 | 33,600 |
| 16 | Non-Residential Distributed Energy PBI | 1,042 | 11,458 | 23,958 | 36,458 | 47,917 | 120,833 |
| 17 | **Total Energy** | **45,345** | **90,833** | **131,216** | **390,818** | **435,653** | **1,093,865** |
| 18 | | | | | | | |
| 19 | **Expense (in $M)** | | | | | | |
| 20 | Renewable Generation [1] | $ - | $ - | $ - | $ 6.5 | $ 6.5 | $ 13.0 |
| 21 | Residential Distributed Energy UFI | 29.9 | 20.0 | 15.0 | 15.0 | 15.0 | 94.9 |
| 22 | Non-Residential Distributed Energy UFI | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 10.0 |
| 23 | Non-Residential Distributed Energy PBI | 0.1 | 1.0 | 2.3 | 3.5 | 4.6 | 11.5 |
| 24 | **Total Expense** | **$ 32.0** | **$ 23.0** | **$ 19.3** | **$ 27.0** | **$ 28.1** | **$ 129.4** |

25 **Option 2 Notes:**

26 - Consists of 93 MW of a utility scale renewable generation PPA (expressed in PV equivalency), 25 MW of PBI based Distributed Energy installations, $2M annual non-residential DE UFI
27 program expansion, and residential DE incremental compliance.

28

### Option 3

| Line No. | Energy (in MWh) | 2012 | 2013 | 2014 | 2015 | 2016 | Total |
|---|---|---|---|---|---|---|---|
| 30 | Renewable Generation [1] | - | - | - | 148,920 | 148,920 | 297,840 |
| 31 | Residential Distributed Energy UFI | 56,652 | 114,115 | 165,410 | 212,021 | 253,014 | 801,212 |
| 32 | Non-Residential Distributed Energy UFI | 2,011 | 4,247 | 6,483 | 9,114 | 11,745 | 33,600 |
| 33 | Non-Residential Distributed Energy PBI | 11,029 | 33,088 | 55,147 | 77,206 | 88,235 | 264,705 |
| 34 | **Total Energy** | **69,692** | **151,450** | **227,040** | **447,261** | **501,914** | **1,397,357** |
| 35 | | | | | | | |
| 36 | **Expense (in $M)** | | | | | | |
| 37 | Renewable Generation [1] | $ - | $ - | $ - | $ 4.4 | $ 4.5 | $ 8.9 |
| 38 | Residential Distributed Energy UFI | 40.0 | 35.0 | 30.0 | 25.0 | 20.0 | 150.0 |
| 39 | Non-Residential Distributed Energy UFI | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 10.0 |
| 40 | Non-Residential Distributed Energy PBI | 0.3 | 2.5 | 4.8 | 7.2 | 9.3 | 24.1 |
| 41 | **Total Expense** | **$ 42.3** | **$ 39.5** | **$ 36.8** | **$ 38.6** | **$ 35.8** | **$ 193.0** |

42 **Option 3 Notes:**

43 - Consists of 68 MW of a utility scale renewable generation PPA (expressed in PV equivalency), 50 MW of PBI based Distributed Energy installations, $2M annual non-residential DE
44 UFI program expansion, and residential DE over compliance.
45 These amount would be $300k greater to capture the payroll associated with the volumetric increase in meter sets.

46

47 **Notes:**

48 [1] Amounts are additive to the expected 32 MW of PV capacity resulting from the 2012 Small Generator RFP.

# Exhibit 3

# Renewable Generation

Exhibit 3A details the expected energy contribution from existing and planned renewable generation projects.

Exhibit 3B details the expected capacity contribution from existing and planned renewable generation projects.

Exhibit 3C details the estimated RES cost for each existing and planned renewable generation project. REDACTED.

Exhibit 3D details the estimated cost per MWh for each existing and planned renewable generation project. REDACTED.

Exhibit 3E details the AZ Sun Program revenue requirements.

## Exhibit 3A: APS Existing and Targeted Generation (MWh)

| Line No. | | 2012 | 2013 | 2014 | 2015 | 2016 | Total | Line No. |
|---|---|---|---|---|---|---|---|---|
| | ***Existing Contracts and APS Resources:*** | | | | | | | |
| 1 | ***Solar:*** | | | | | | | 1 |
| 2 | Photovoltaic Sites [1] | 15,937 | 15,937 | 15,937 | 15,937 | 15,937 | 79,685 | 2 |
| 3 | Saguaro CSP | 2,015 | 2,015 | 2,015 | 2,015 | 2,015 | 10,075 | 3 |
| 4 | 2009 Small Generation: Ajo | 10,467 | 10,415 | 10,363 | 10,311 | 10,259 | 51,815 | 4 |
| 5 | 2009 Small Generation: Prescott | 25,120 | 24,869 | 24,620 | 24,374 | 24,130 | 123,113 | 5 |
| 6 | 2010 Small Generation: Tonopah | - | 35,070 | 34,789 | 34,511 | 34,235 | 138,605 | 6 |
| 7 | Paloma | 41,825 | 41,531 | 41,241 | 40,952 | 40,665 | 206,214 | 7 |
| 8 | Hyder | 38,043 | 40,466 | 40,263 | 40,062 | 39,862 | 198,696 | 8 |
| 9 | Cotton Center | 46,028 | 45,798 | 45,569 | 45,341 | 45,114 | 227,850 | 9 |
| 10 | Chino Valley [2] | 14,837 | 46,417 | 46,185 | 45,954 | 45,724 | 199,117 | 10 |
| 11 | Luke AFB | - | 8,691 | 34,676 | 34,503 | 34,330 | 112,200 | 11 |
| 12 | Solana CSP | - | 282,641 | 903,349 | 903,349 | 903,349 | 2,992,688 | 12 |
| 13 | ***Total Solar*** | *194,272* | *553,850* | *1,199,007* | *1,197,309* | *1,195,620* | *4,340,058* | 13 |
| 14 | ***Wind:*** | | | | | | | 14 |
| 15 | Aragonne Mesa | 269,939 | 269,239 | 269,239 | 269,239 | 269,939 | 1,347,595 | 15 |
| 16 | High Lonesome | 299,592 | 299,592 | 299,592 | 299,592 | 299,592 | 1,497,960 | 16 |
| 17 | Perrin Ranch | 268,784 | 282,163 | 282,163 | 282,163 | 282,931 | 1,398,204 | 17 |
| 18 | ***Total Wind*** | *838,315* | *850,994* | *850,994* | *850,994* | *852,462* | *4,243,759* | 18 |
| 19 | ***Geothermal:*** | | | | | | | 19 |
| 20 | CE Turbo | 73,465 | 73,264 | 73,264 | 73,264 | 73,465 | 366,722 | 20 |
| 21 | ***Total Geothermal*** | *73,465* | *73,264* | *73,264* | *73,264* | *73,465* | *366,722* | 21 |
| 22 | ***Biomass/Biogas:*** | | | | | | | 22 |
| 23 | Snowflake White Mountain Power [3] | 69,469 | 60,806 | 50,978 | 47,424 | 41,717 | 270,394 | 23 |
| 24 | Sexton Glendale Landfill | 20,857 | 20,800 | 20,800 | 20,800 | 20,857 | 104,114 | 24 |
| 25 | 2010 Small Generation: Surprise Landfill | 10,807 | 22,560 | 22,560 | 22,560 | 22,622 | 101,109 | 25 |
| 26 | ***Total Biomass/Biogas*** | *101,133* | *104,166* | *94,338* | *90,784* | *85,196* | *475,617* | 26 |
| 27 | | | | | | | | 27 |
| 28 | ***Subtotal - Contracted Projects*** | ***1,207,185*** | ***1,582,274*** | ***2,217,603*** | ***2,212,351*** | ***2,206,743*** | ***9,426,156*** | 28 |
| 29 | | | | | | | | 29 |
| 30 | ***Targeted Additions:*** | | | | | | | 30 |
| 31 | 2011 Small Generation RFP [4] | - | 35,000 | 70,000 | 70,000 | 70,000 | 245,000 | 31 |
| 32 | 2012 Small Generation RFP [4] | - | - | 35,000 | 70,000 | 70,000 | 175,000 | 32 |
| 33 | AZ Sun Tranche 2 Future Project | - | 27,923 | 37,230 | 37,230 | 37,230 | 139,613 | 33 |
| 34 | AZ Sun Tranche 3 Future Project [5] | - | 9,855 | 39,420 | 39,420 | 39,420 | 128,115 | 34 |
| 35 | AZ Sun Tranche 3 Future Project [5] | - | - | 52,560 | 70,080 | 70,080 | 192,720 | 35 |
| 36 | AZ Sun Tranche 3 Future Project [5] | - | - | - | 82,125 | 109,500 | 191,625 | 36 |
| 37 | ***Subtotal - Targeted Additions*** | ***-*** | ***72,778*** | ***234,210*** | ***368,855*** | ***396,230*** | ***1,072,073*** | 37 |
| 38 | | | | | | | | 38 |
| 39 | **Base Renewable Generation Energy** | **1,207,185** | **1,655,052** | **2,451,813** | **2,581,206** | **2,602,973** | **10,498,229** | 39 |
| 40 | | | | | | | | 40 |
| 41 | **Total Renewable Generation Energy [6]** | | | | | | | 41 |
| 42 | *Option 1* | - | - | - | *258,420* | *258,420* | *516,840* | 42 |
| 43 | ***Base with Option 1*** | ***1,207,185*** | ***1,655,052*** | ***2,451,813*** | ***2,839,626*** | ***2,861,393*** | ***11,015,069*** | 43 |
| 44 | *Option 2* | - | - | - | *216,504* | *216,504* | *433,008* | 44 |
| 45 | ***Base with Option 2*** | ***1,207,185*** | ***1,655,052*** | ***2,451,813*** | ***2,797,710*** | ***2,819,477*** | ***10,931,237*** | 45 |
| 46 | *Option 3* | - | - | - | *148,920* | *148,920* | *297,840* | 46 |
| 47 | ***Base with Option 3*** | ***1,207,185*** | ***1,655,052*** | ***2,451,813*** | ***2,730,126*** | ***2,751,893*** | ***10,796,069*** | 47 |
| 48 | | | | | | | | 48 |

**Notes:**

[1] Includes the REC multiplier for in-state solar installation prior to 12/31/2005 per Decision No. 69127. For purposes of consistency in this exhibit, RECs are counted as energy.

[2] Based on Chino Valley approved as requested in this 2012 RES IP which will enable APS to commence construction January 2012.

[3] Includes costs from Snowflake White Mountain Power which is split between Renewable Generation (RG) and Distributed Energy (DE). The split is based on the amount of the wholesale DE component allowed in a given year.

[4] These projects are part of APS's authorized Small Generator Standard Offer program.

[5] Assumes a staggered deployment of an additional phase of AZ Sun development. All project in-service dates are based on development planning assumption. For additional detail on the AZ Sun program see Exhibit 3E.

[6] For detail on the three options please refer to Exhibit 2B.

## Exhibit 3B: APS Existing and Targeted Generation Capacity (MW)

| Line No. | | 2012 | 2013 | 2014 | 2015 | 2016 | Line No. |
|---|---|---|---|---|---|---|---|
| 1 | ***Existing Contracts and APS Resources:*** | | | | | | 1 |
| 2 | ***Solar:*** | | | | | | 2 |
| 3 | APS-Owned: Photovoltaic Sites [1] | 5 | 5 | 5 | 5 | 5 | 3 |
| 4 | APS Owned: Saguaro CSP [1] | 1 | 1 | 1 | 1 | 1 | 4 |
| 5 | 2009 Small Generation: Ajo | 4 | 4 | 4 | 4 | 4 | 5 |
| 6 | 2009 Small Generation: Prescott | 10 | 10 | 10 | 10 | 10 | 6 |
| 7 | 2010 Small Generation: Tonopah | - | 15 | 15 | 15 | 15 | 7 |
| 8 | Paloma | 17 | 17 | 17 | 17 | 17 | 8 |
| 9 | Hyder | 16 | 16 | 16 | 16 | 16 | 9 |
| 10 | Cotton Center | 17 | 17 | 17 | 17 | 17 | 10 |
| 11 | Chino Valley | 19 | 19 | 19 | 19 | 19 | 11 |
| 12 | Luke AFB | - | 14 | 14 | 14 | 14 | 12 |
| 13 | Solana CSP | - | 250 | 250 | 250 | 250 | 13 |
| 14 | ***Total Solar*** | *89* | *368* | *368* | *368* | *368* | 14 |
| 15 | ***Wind:*** | | | | | | 15 |
| 16 | Aragonne Mesa | 90 | 90 | 90 | 90 | 90 | 16 |
| 17 | High Lonesome | 100 | 100 | 100 | 100 | 100 | 17 |
| 18 | Perrin Ranch | 99 | 99 | 99 | 99 | 99 | 18 |
| 19 | ***Total Wind*** | *289* | *289* | *289* | *289* | *289* | 19 |
| 20 | ***Geothermal:*** | | | | | | 20 |
| 21 | CE Turbo | 10 | 10 | 10 | 10 | 10 | 21 |
| 22 | ***Total Geothermal*** | *10* | *10* | *10* | *10* | *10* | 22 |
| 23 | ***Biomass/Biogas:*** | | | | | | 23 |
| 24 | Snowflake White Mountain Power [2] | 15 | 15 | 15 | 15 | 15 | 24 |
| 25 | Sexton Glendale Landfill | 3 | 3 | 3 | 3 | 3 | 25 |
| 26 | 2010 Small Generation: Surprise Landfill | 3 | 3 | 3 | 3 | 3 | 26 |
| 27 | ***Total Biomass/Biogas*** | *21* | *21* | *21* | *21* | *21* | 27 |
| 28 | | | | | | | 28 |
| 29 | ***Subtotal - Contracted Projects*** | ***409*** | ***688*** | ***688*** | ***688*** | ***688*** | 29 |
| 30 | | | | | | | 30 |
| 31 | ***Targeted Additions:*** | | | | | | 31 |
| 32 | 2011 Small Generation RFP [3] | - | 32 | 32 | 32 | 32 | 32 |
| 33 | 2012 Small Generation RFP [3] | - | - | 32 | 32 | 32 | 33 |
| 34 | AZ Sun Tranche 2 Future Project | - | 17 | 17 | 17 | 17 | 34 |
| 35 | AZ Sun Tranche 3 Future Project [4] | - | 18 | 18 | 18 | 18 | 35 |
| 36 | AZ Sun Tranche 3 Future Project [4] | - | - | 32 | 32 | 32 | 36 |
| 37 | AZ Sun Tranche 3 Future Project [4] | - | - | - | 50 | 50 | 37 |
| 38 | ***Subtotal - Targeted Additions*** | ***-*** | ***67*** | ***131*** | ***181*** | ***181*** | 38 |
| 39 | | | | | | | 39 |
| 40 | **Base Total Renewable Generation Capacity** | **409** | **755** | **819** | **869** | **869** | 40 |
| 41 | | | | | | | 41 |
| 42 | ***Total Renewable Generation Capacity*** | | | | | | 42 |
| 43 | *Option 1* | - | - | - | *118* | *118* | 43 |
| 44 | ***Base with Option 1*** | ***409*** | ***755*** | ***819*** | ***987*** | ***987*** | 44 |
| 45 | *Option 2* | - | - | - | *93* | *93* | 45 |
| 46 | ***Base with Option 2*** | ***409*** | ***755*** | ***819*** | ***962*** | ***962*** | 46 |
| 47 | *Option 3* | - | - | - | *68* | *68* | 47 |
| 48 | ***Base with Option 3*** | ***409*** | ***755*** | ***819*** | ***937*** | ***937*** | 48 |
| 49 | | | | | | | 49 |

**Notes:**

[1] Includes the REC multiplier for in-state solar installation prior to 12/31/2005 per Decision No. 69127.

[2] As noted in Exhibit 2A, this project is split between Renewable Generation (RG) and Distributed Energy (DE). As the DE MWh requirement increases, the amount shown here as allocated to RG decreases.

[3] These projects are part of APS's authorized Small Generator Standard Offer program and are estimated as solar PV capacity.

[4] Assumes a staggered deployment of an additional phase of AZ Sun development. All project in-service dates are based on development planning assumption. For additional detail on the AZ Sun program see Exhibit 3E.

[5] Capacity is expressed in MWac.

[6] For detail on the three options please refer to Exhibit 2B.

REDACTED

## Exhibit 3C: APS Renewable Existing and Targeted Generation RES Costs (in $M's)

| Line No. | | 2012 | 2013 | 2014 | 2015 | 2016 | Total | Line No. |
|---|---|---|---|---|---|---|---|---|
| | ***Existing Contracts and APS Resources:*** | | | | | | | |
| 1 | ***Solar:*** | [redacted] | | | | | | 1 |
| 2 | Photovoltaic Sites [1] | | | | | | | 2 |
| 3 | Saguaro CSP [2] | | | | | | | 3 |
| 4 | 2009 Small Generation: Ajo | | | | | | | 4 |
| 5 | 2009 Small Generation: Prescott | | | | | | | 5 |
| 6 | 2010 Small Generation: Tonopah | | | | | | | 6 |
| 7 | Paloma [3] | | | | | | | 7 |
| 8 | Hyder [3] | | | | | | | 8 |
| 9 | Cotton Center [3] | | | | | | | 9 |
| 10 | Chino Valley [3] | | | | | | | 10 |
| 11 | Luke AFB [3] | | | | | | | 11 |
| 12 | Solana CSP | | | | | | | 12 |
| 13 | ***Total Solar*** | | | | | | | 13 |
| 14 | ***Wind:*** | | | | | | | 14 |
| 15 | Aragonne Mesa | | | | | | | 15 |
| 16 | High Lonesome | | | | | | | 16 |
| 17 | Perrin Ranch | | | | | | | 17 |
| 18 | ***Total Wind*** | | | | | | | 18 |
| 19 | ***Geothermal:*** | | | | | | | 19 |
| 20 | CE Turbo | | | | | | | 20 |
| 21 | ***Total Geothermal*** | | | | | | | 21 |
| 22 | ***Biomass/Biogas:*** | | | | | | | 22 |
| 23 | Snowflake White Mountain Power [4] | | | | | | | 23 |
| 24 | Sexton Glendale Landfill | | | | | | | 24 |
| 25 | 2010 Small Generation: Surprise Landfill | | | | | | | 25 |
| 26 | ***Total Biomass/Biogas*** | | | | | | | 26 |
| 27 | | | | | | | | 27 |
| 28 | ***Subtotal - Contracted Projects*** | | | | | | | 28 |
| 29 | | | | | | | | 29 |
| 30 | ***Targeted Additions:*** | | | | | | | 30 |
| 31 | 2011 Small Generation RFP [5] | | | | | | | 31 |
| 32 | 2012 Small Generation RFP [5] | | | | | | | 32 |
| 33 | AZ Sun Tranche 2 Future Project [4] | | | | | | | 33 |
| 33 | AZ Sun Tranche 3 Future Project [3,6] | | | | | | | 33 |
| 34 | AZ Sun Tranche 3 Future Project [3,6] | | | | | | | 34 |
| 35 | AZ Sun Tranche 3 Future Project [3,6] | | | | | | | 35 |
| 36 | ***Subtotal - Targeted Additions*** | | | | | | | 36 |
| 37 | | | | | | | | 37 |
| 38 | **Base Total Renewable Generation** | **$ 67.5** | **$ 46.0** | **$ 104.8** | **$ 84.3** | **$ 90.6** | **$ 393.2** | 38 |
| 39 | | | | | | | | 39 |
| 40 | ***Total Renewable Generation Cost*** [7] | | | | | | | 40 |
| 41 | *Option 1* | *$ -* | *$ -* | *$ -* | *$ 7.7* | *$ 7.8* | *$ 15.5* | 41 |
| 42 | ***Base with Option 1*** | ***$ 67.5*** | ***$ 46.0*** | ***$ 104.8*** | ***$ 92.0*** | ***$ 98.4*** | ***$ 408.7*** | 42 |
| 43 | *Option 2* | *$ -* | *$ -* | *$ -* | *$ 6.5* | *$ 6.5* | *$ 13.0* | 43 |
| 44 | ***Base with Option 2*** | ***$ 67.5*** | ***$ 46.0*** | ***$ 104.8*** | ***$ 90.8*** | ***$ 97.1*** | ***$ 406.2*** | 44 |
| 45 | *Option 3* | *$ -* | *$ -* | *$ -* | *$ 4.4* | *$ 4.5* | *$ 8.9* | 45 |
| 46 | ***Base with Option 3*** | ***$ 67.5*** | ***$ 46.0*** | ***$ 104.8*** | ***$ 88.7*** | ***$ 95.1*** | ***$ 402.1*** | 46 |

**Notes:**

[1] Project is APS owned and was funded by customers under the Environmental Portfolio Standard. There is no recurring contract cost to be funded by the RES.

[2] The amount represented in 2012 and 2013 reflects the performance O&M contract for the Saguaro CSP generation facility.

[3] For detail of the AZ Sun program see Exhibit 3E. Assumes rate case adjudications for base rates in 2012 and 2014.

[4] As noted in Exhibit 2, this project is split between Renewable Generation (RG) and Distributed Energy (DE). As the DE MWh requirement increases, the amount shown here as allocated to RG decreases.

[5] These projects are part of APS's authorized Small Generator Standard Offer program.

[6] Assumes a staggered deployment of an additional phase of AZ Sun development. All project in-service dates are based on development planning assumption. For additional detail on the AZ Sun program see Exhibit 3E.

[7] For detail on the three options please refer to Exhibit 2B.

REDACTED

## Exhibit 3D: Third Party APS IP Renewable Generation RES Costs ($/MWh) [1]

| Line No. | | 2012 | 2013 | 2014 | 2015 | 2016 | Line No. |
|---|---|---|---|---|---|---|---|
| | ***Existing Contracts:*** | | | | | | |
| 1 | ***Solar:*** | [redacted] | | | | | 1 |
| 2 | 2009 Small Generation: Ajo | | | | | | 2 |
| 3 | 2009 Small Generation: Prescott | | | | | | 3 |
| 4 | 2010 Small Generation: Tonopah | | | | | | 4 |
| 5 | Solana CSP | | | | | | 5 |
| 6 | **Wind:** | | | | | | 6 |
| 7 | Aragonne Mesa | | | | | | 7 |
| 8 | High Lonesome | | | | | | 8 |
| 9 | Perrin Ranch | | | | | | 9 |
| 10 | ***Geothermal:*** | | | | | | 10 |
| 11 | CE Turbo | | | | | | 11 |
| 12 | ***Biomass/Biogas:*** | | | | | | 12 |
| 13 | Snowflake White Mountain Power [2] | | | | | | 13 |
| 14 | Sexton Glendale Landfill | | | | | | 14 |
| 15 | 2010 Small Generation: Surprise Landfill | | | | | | 15 |
| 16 | ***Estimated:*** | | | | | | 16 |
| 17 | 2011 Small Generation RFP [3] | | | | | | 17 |

**Notes:**

[1] This Exhibit is an assessment of the cost per MWh each renewable generation resource contributes and does not include the RG expansion described in Exhibit 2B.

[2] As noted in Exhibit 2, this project is split between Renewable Generation (RG) and Distributed Energy (DE). As the DE MWh requirement increases, the amount shown here as allocated to RG decreases.

[3] These projects are part of APS's proposed Small Generator Standard Offer program.

# Exhibit 3E: AZ Sun Program Revenue Requirements

## AZ Sun Revenue Requirements (in $M's)[1,2,3]

| | MW | 2012 | 2013 | 2014 | 2015 | 2016 |
|---|---|---|---|---|---|---|
| Existing Contracts[4] | | | | | | |
| Paloma | 17 | $ 12.0 | $ 9.8 | $ 7.0 | $ 6.6 | $ 6.5 |
| Hyder I | 11 | 10.1 | 8.7 | 6.3 | 6.0 | 5.9 |
| Cotton Center | 17 | 14.3 | 11.5 | 8.2 | 7.8 | 7.6 |
| Hyder II | 5 | 2.5 | 2.4 | 1.7 | 1.6 | 1.6 |
| Chino Valley | 19 | 5.3 | 12.2 | 8.9 | 8.5 | 8.3 |
| Luke AFB | 14 | - | 2.2 | 9.1 | 8.1 | 7.5 |
| Estimated Projects[5] | | | | | | |
| AZ Sun Balance | 17 | - | 9.6 | 10.4 | 9.3 | 8.6 |
| AZ Sun Tranche 3 - #1 | 18 | - | 2.5 | 10.4 | 9.3 | 8.6 |
| AZ Sun Tranche 3 - #2 | 32 | - | - | 13.4 | 17.9 | 16.5 |
| AZ Sun Tranche 3 - #3 | 50 | - | - | - | 20.9 | 27.4 |
| **Revenue Requirement Total** | **200** | **$ 44.2** | **$ 58.9** | **$ 75.4** | **$ 96.0** | **$ 98.5** |

## Total AZ Sun Costs to the RES Adjustor (in $M's)[6]

| | MW | 2012 | 2013 | 2014 | 2015 | 2016 |
|---|---|---|---|---|---|---|
| Existing Contracts[4] | | | | | | |
| Paloma | 17 | $ 12.0 | - | - | - | - |
| Hyder I | 11 | 10.1 | - | - | - | - |
| Cotton Center | 17 | 14.3 | - | - | - | - |
| Hyder II | 5 | 2.5 | - | - | - | - |
| Chino Valley | 19 | 5.3 | - | - | - | - |
| Luke AFB | 14 | - | 2.2 | 9.1 | - | - |
| Estimated Projects[5] | | | | | | |
| AZ Sun Balance | 17 | - | 9.6 | 10.4 | - | - |
| AZ Sun Tranche 3 - #1 | 18 | - | 2.5 | 10.4 | - | - |
| AZ Sun Tranche 3 - #2 | 32 | - | - | 13.4 | - | - |
| AZ Sun Tranche 3 - #3 | 50 | - | - | - | 20.9 | 27.4 |
| **RES Cost Total** | **200** | **$ 44.2** | **$ 14.3** | **$ 43.3** | **$ 20.9** | **$ 27.4** |

**Notes:**

[1] Assumes a $25,000 MW-yr O&M for solar photovoltaic installations.

[2] Assumes a total depreciable life of 30 years.

[3] Presentation shows full year of recovery for 2012 and 2014. Actual recovery via the RES adjustor may differ as there will be a simultaneous and offsetting adjustment of the RES and base rates upon the effective date of new base rates.

[4] Includes projects currently under contract through the Company's approved AZ Sun program.

[5] Includes the 17 MW project that is the remaining balance of the approved AZ Sun program as well as future projects as part of the requested 100 MW expansion of the program.

# Exhibit 4

# Customer-Sited Distributed Energy

**REVISED** Exhibit 4A details the estimated energy contribution from existing and planned distributed generation projects.

**REVISED** Exhibit 4B details the annual incentive budget by residential and non-residential classifications.

Exhibit 4C details the estimated total cost of the APS Production-Based Incentive program including cumulative lifetime authorizations.

Exhibit 4D details the budgeted annualized expansion of new Production-Based Incentive contracts for the plan years of 2012-2016.

Exhibit 4E details the portion of the Community Power Project – Flagstaff Pilot that is recovered through Adjustment Schedule RES.

## REVISED Exhibit 4A: APS Customer Sited Distributed Energy Programs (MWh)

| Line No. | | 2012 | 2013 | 2014 | 2015 | 2016 | Total | Line No. |
|---|---|---|---|---|---|---|---|---|
| | **Residential** | | | | | | | |
| 1 | Current Energy Production[1] | 126,943 | 126,943 | 126,943 | 126,943 | 126,943 | 634,715 | 1 |
| 2 | Community Power Project | 902 | 902 | 902 | 902 | 902 | 4,510 | 2 |
| 3 | ***Total Residential*** | ***127,845*** | ***127,845*** | ***127,845*** | ***127,845*** | ***127,845*** | ***639,225*** | 3 |
| 4 | *Total Residential DE Target* | *147,959* | *170,392* | *195,758* | *221,555* | *271,733* | | 4 |
| 5 | **Non-Residential** | | | | | | | 5 |
| 6 | *Existing Contractual Commitments:* | | | | | | | 6 |
| 7 | Current Up-Front Incentives | 21,476 | 21,476 | 21,476 | 21,476 | 21,476 | 107,380 | 7 |
| 8 | Production-based Incentives [2] | 116,830 | 116,830 | 116,830 | 116,830 | 116,830 | 584,150 | 8 |
| 9 | 2008 Distributed Energy RFP | 7,751 | 46,937 | 72,895 | 102,689 | 102,125 | 332,397 | 9 |
| 10 | Schools and Government | 3,125 | 16,666 | 33,729 | 33,729 | 33,729 | 120,978 | 10 |
| 11 | Innovative Technologies | 2,000 | 12,000 | 12,000 | 12,000 | 12,000 | 50,000 | 11 |
| 12 | Wholesale DE [3] | 42,360 | 50,721 | 60,549 | 64,103 | 70,112 | 287,845 | 12 |
| 13 | ***Total Non-Residential*** | ***193,542*** | ***264,630*** | ***317,479*** | ***350,827*** | ***356,272*** | ***1,482,750*** | 13 |
| 14 | *Total Non-Residential DE Target* | *147,959* | *170,392* | *195,757* | *221,554* | *271,733* | | 14 |
| 15 | | | | | | | | 15 |
| 16 | ***Base Total Customer Sited Distributed Energy (MWh)*** | ***321,387*** | ***392,475*** | ***445,324*** | ***478,672*** | ***484,117*** | ***2,121,975*** | 16 |
| 17 | | | | | | | | 17 |
| 18 | APS Schools and Government | 2,897 | 15,451 | 31,271 | 31,271 | 31,271 | 112,161 | 18 |
| 19 | APS Customer Sited Community Solar | 11,029 | 33,088 | 55,147 | 77,206 | 88,235 | 264,705 | 19 |
| 20 | ***Total APS Customer Sited Community Solar*** | ***13,926*** | ***48,539*** | ***86,418*** | ***108,477*** | ***119,506*** | ***376,866*** | 20 |
| 21 | | | | | | | | 21 |
| 22 | | | | | | | | 22 |
| 23 | ***Total Distributed Energy Production*** | | | | | | | 23 |
| 24 | *Option 1* | *21,016* | *43,449* | *68,814* | *94,611* | *144,790* | *372,680* | 24 |
| 25 | ***Base with Option 1*** | ***342,403*** | ***435,924*** | ***514,138*** | ***573,283*** | ***628,907*** | ***2,494,655*** | 25 |
| 26 | *Percent of DE Target* | *116%* | *128%* | *131%* | *129%* | *116%* | | 26 |
| 27 | *Option 2* | *45,345* | *90,833* | *131,216* | *174,314* | *219,149* | *660,857* | 27 |
| 28 | ***Base with Option 2*** | ***366,732*** | ***483,308*** | ***576,540*** | ***652,986*** | ***703,266*** | ***2,782,832*** | 28 |
| 29 | *Percent of DE Target* | *124%* | *142%* | *147%* | *147%* | *129%* | | 29 |
| 30 | *Option 3* | 69,692 | 151,450 | 227,040 | 298,341 | 352,994 | 1,099,517 | 30 |
| 31 | ***Base with Option 3*** | ***391,079*** | ***543,925*** | ***672,364*** | ***777,013*** | ***837,111*** | ***3,221,492*** | 31 |
| 32 | *Percent of DE Target* | *132%* | *160%* | *172%* | *175%* | *154%* | | 32 |

**Notes:**

[1] Estimated total energy resulting from incentives paid with funds through 2011.

[2] Existing PBI Commitments up to the $420 million lifetime authorization approved in Commission Decision Nos. 71254 and 71459.

[3] This line item is made up of a project (Snowflake White Mountain Power) that is split between Renewable Generation and DE. The split is based on the amount of the wholesale component in a given year.

[4] For detail on the three options please refer to Exhibit 2B.

## REVISED Exhibit 4B: APS Customer Sited Distributed Energy Incentive Program Costs (in $M's)

| Line No. | | 2012 | 2013 | 2014 | 2015 | 2016 | Total | Line No. |
|---|---|---|---|---|---|---|---|---|
| | **Residential** [1] | | | | | | | |
| 1 | | | | *See Exhibit 2B* | | | | 1 |
| 2 | **Non-Residential** | | | | | | | 2 |
| 3 | | | | | | | | 3 |
| 4 | *Existing Contractual Commitments:* | | | | | | | 4 |
| 5 | Production-based Incentives (Existing) [2] | $ 7.9 | $ 13.3 | $ 14.1 | $ 14.1 | $ 14.1 | $ 63.5 | 5 |
| 6 | 2008 Distributed Energy RFP | 4.9 | 7.4 | 9.6 | 9.7 | 9.6 | 41.2 | 6 |
| 7 | Innovative Technologies [3] | 0.2 | 1.3 | 1.3 | 1.3 | 1.3 | 5.4 | 7 |
| 8 | Wholesale DE [4] | 0.2 | 0.2 | 0.4 | 0.5 | 0.7 | 2.0 | 8 |
| 9 | *Total Current Commitments* | *$ 13.2* | *$ 22.2* | *$ 25.4* | *$ 25.6* | *$ 25.7* | *$ 112.1* | 9 |
| 10 | | | | | | | | 10 |
| 11 | *New Program Commitments:* | | | | | | | 11 |
| 12 | RE/EE Program Initiative | $ 1.5 | $ - | $ - | $ - | $ - | $ 1.5 | 12 |
| 13 | Energy Assistance for Renewable Neighborhoods | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 2.5 | 13 |
| 14 | Customer Self-Directed [5] | - | - | - | - | - | - | 14 |
| 15 | *Total New Commitments* | *$ 2.0* | *$ 0.5* | *$ 0.5* | *$ 0.5* | *$ 0.5* | *$ 4.0* | 15 |
| 16 | | | | | | | | 16 |
| 17 | *Community Based Distributed Energy:* | | | | | | | 17 |
| 18 | APS Customer Sited Community Solar | $ 2.9 | $ 11.2 | $ 18.3 | $ 8.3 | $ 11.9 | $ 52.6 | 18 |
| 19 | Schools and Gov't Rev Requirement | 4.4 | 1.5 | 6.0 | 5.4 | 5.0 | 22.3 | 19 |
| 20 | Schools and Gov't Incentives | 2.2 | 5.4 | 5.4 | 4.6 | 4.6 | 22.2 | 20 |
| 21 | Schools and Gov't O&M | 0.2 | 0.2 | - | - | - | 0.4 | 21 |
| 22 | Flagstaff CPP | 0.4 | 0.2 | - | - | - | 0.6 | 22 |
| 23 | *Total Community Based Distributed Energy Program* | *$ 10.1* | *$ 18.5* | *$ 29.7* | *$ 18.3* | *$ 21.5* | *98.1* | 23 |
| 24 | | | | | | | | 24 |
| 25 | **Base Non-Residential Customer Sited Distributed Energy Incentive Programs** | **$ 25.3** | **$ 41.2** | **$ 55.6** | **$ 44.4** | **$ 47.7** | **$ 214.2** | 25 |
| 26 | | | | | | | | 26 |
| 27 | ***Total Distributed Energy Cost*** [6] | | | | | | | 27 |
| 28 | *Option 1* | *$ 14.8* | *$ 13.7* | *$ 14.8* | *$ 13.8* | *$ 24.5* | *$ 81.6* | 28 |
| 29 | ***Base with Option 1*** | ***$ 40.1*** | ***$ 54.9*** | ***$ 70.4*** | ***$ 58.2*** | ***$ 72.2*** | ***$ 295.8*** | 29 |
| 30 | *Option 2* | *$ 32.0* | *$ 23.0* | *$ 19.3* | *$ 20.5* | *$ 21.6* | *$ 116.4* | 30 |
| 31 | ***Base with Option 2*** | ***$ 57.3*** | ***$ 64.2*** | ***$ 74.9*** | ***$ 64.9*** | ***$ 69.3*** | ***$ 330.6*** | 31 |
| 32 | *Option 3* | *$ 42.3* | *$ 39.5* | *$ 36.8* | *$ 34.2* | *$ 31.3* | *$ 184.1* | 32 |
| 33 | ***Base with Option 3*** | ***$ 67.6*** | ***$ 80.7*** | ***$ 92.4*** | ***$ 78.6*** | ***$ 79.0*** | ***$ 398.3*** | 33 |

**Notes:**

[1] For the Residential DE UFI expansion refer to the DE expansion options outlined in Exhibit 2B.

[2] Forecast based on existing PBI Commitments up to the $420 million lifetime authorization approved in Commission Decision Nos. 71254 and 71459.

[3] Assumption of deployment of resource in Nov. 2012. Utilizes funds originally authorized under the DE RFP of $250M lifetime authorization as per Decision No. 71459.

[4] Includes Snowflake White Mountain Power that is split between Renewable Generation and DE. The split is based on the amount of the wholesale component in a given year.

[5] No customers have applied for self-direction and therefore no allocation has been made.

[6] For detail on the three options please refer to Exhibit 2B.

## Exhibit 4C: PBI Commitments (In $000's)

| Line No | | 2012 | 2013 | 2014 | 2015 | 2016 | Line No |
|---|---|---|---|---|---|---|---|
| 1 | *Current Contractual Commitments:* | | | | | | 1 |
| 2 | Total Cash Commitment for Existing PBIs | $ 7,944 | $ 13,272 | $ 14,063 | $ 14,063 | $ 14,063 | 2 |
| 3 | DE RFP ($250 million DE RFP lifetime authorization) | $ 4,910 | $ 7,369 | $ 9,556 | $ 9,705 | $ 9,648 | 3 |
| 4 | Innovative Technologies ($25 million lifetime authorization) | $ 156 | $ 1,250 | $ 1,250 | $ 1,250 | $ 1,250 | 4 |
| 5 | *Total Cash Commitment for Existing PBI Contracts* | *$ 13,010* | *$ 21,891* | *$ 24,869* | *$ 25,018* | *$ 24,961* | 5 |
| 6 | | | | | | | 6 |
| 7 | *Program Expansion (New Commitments):* | | | | | | 7 |
| 8 | PBI Annual Commitment (Additional lifetime authorization)[1] | $ - | $ - | $ - | $ - | $ - | 8 |
| 9 | Schools and Govt. Building Commitment (up to $66 million lifetime authorization) | $ 1,754 | $ 1,747 | $ 1,740 | $ 1,724 | $ 1,727 | 9 |
| 10 | *Total Cash Commitment for New PBI Contracts* | *$ 1,754* | *$ 1,747* | *$ 1,740* | *$ 1,724* | *$ 1,727* | 10 |
| 11 | | | | | | | 11 |
| 12 | *Total PBI Contractual Commitments:* | | | | | | 12 |
| 13 | 2006 Contracts | $ - | $ - | $ - | $ - | $ - | 13 |
| 14 | 2007 Contracts | $ 93 | $ 93 | $ 93 | $ 93 | $ 93 | 14 |
| 15 | 2008 Contracts | $ 789 | $ 789 | $ 789 | $ 789 | $ 789 | 15 |
| 16 | 2009 Contracts | $ 1,086 | $ 1,086 | $ 1,086 | $ 1,086 | $ 1,086 | 16 |
| 17 | 2010 Contracts | $ 5,649 | $ 7,619 | $ 7,619 | $ 7,619 | $ 7,619 | 17 |
| 18 | 2011 Contracts | $ 327 | $ 3,685 | $ 4,476 | $ 4,476 | $ 4,476 | 18 |
| 19 | 2012 Contracts | $ - | $ - | $ - | $ - | $ - | 19 |
| 20 | 2013 Contracts | $ - | $ - | $ - | $ - | $ - | 20 |
| 21 | 2014 Contracts | $ - | $ - | $ - | $ - | $ - | 21 |
| 22 | 2015 Contracts | $ - | $ - | $ - | $ - | $ - | 22 |
| 23 | DE RFP ($250 million DE RFP lifetime authorization) | $ 4,910 | $ 7,369 | $ 9,556 | $ 9,705 | $ 9,648 | 23 |
| 24 | Innovative Technologies ($25 million lifetime authorization)[2] | $ 156 | $ 1,250 | $ 1,250 | $ 1,250 | $ 1,250 | 24 |
| 25 | Total Schools and Govt. Building Commitment (up to $93 million lifetime authorization) | $ 3,498 | $ 3,488 | $ 3,479 | $ 3,471 | $ 3,462 | 25 |
| 26 | | | | | | | 26 |
| 27 | ***Annual Cash Commitment for All PBIs*** | ***$ 16,508*** | ***$ 25,379*** | ***$ 28,348*** | ***$ 28,489*** | ***$ 28,423*** | 27 |
| 28 | | | | | | | 28 |
| 29 | *Cumulative authorized commitment*[3] | *$ 420,000* | *$ 420,000* | *$ 420,000* | *$ 420,000* | *$ 420,000* | 29 |
| 30 | *Cumulative authorization Commitment Expansion*[4] | *$ -* | *$ -* | *$ -* | *$ -* | *$ -* | 30 |
| 31 | *Cumulative Authorized DE RFP and Innovative Technologies: Commitment* | *$ 250,000* | *$ 250,000* | *$ 250,000* | *$ 250,000* | *$ 250,000* | 31 |
| 32 | ***Cumulative Lifetime Commitment for All PBIs*** | ***$ 670,000*** | ***$ 670,000*** | ***$ 670,000*** | ***$ 670,000*** | ***$ 670,000*** | 32 |

**Notes:**

[1] Additional PBI commitments are outlined on Exhibit 4D (Options 1 - 3), as each option outlined in this plan has different payment schedules.

[2] The Innovative Technologies RFP utilized $25M of the originally authorized $250M DE RFP.

[3] PBI lifetime authorization approved in Commission Decision Nos. 71254 and 71459 of $420 million.

[4] Option 1 of the PBI expansion has no additional lifetime commitments, Option 2 adds $30M of lifetime commitments, and Option 3 adds $60M of lifetime commitments.

## Exhibit 4D: PBI New Contracts Expansion (in $000's)

**Option 1**

No PBI expansion included in Option 1.

**Option 2 (2012-2014)**

Medium Projects

| | Year 1 | | | | Year 2 | | | | Year 3+ | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| NP1 | $ - | $ - | $ 16,493 | $ 49,479 | $ 49,479 | $ 49,479 | $ 49,479 | $ 49,479 | $ 49,479 | $ 49,479 | $ 49,479 | $ 49,479 |
| NP2 | $ - | $ - | $ - | $ 32,986 | $ 49,479 | $ 49,479 | $ 49,479 | $ 49,479 | $ 49,479 | $ 49,479 | $ 49,479 | $ 49,479 |
| NP3 | $ - | $ - | $ - | $ - | $ 49,479 | $ 49,479 | $ 49,479 | $ 49,479 | $ 49,479 | $ 49,479 | $ 49,479 | $ 49,479 |
| NP4 | $ - | $ - | $ - | $ - | $ 16,493 | $ 49,479 | $ 49,479 | $ 49,479 | $ 49,479 | $ 49,479 | $ 49,479 | $ 49,479 |
| NP5 | $ - | $ - | $ - | $ - | $ - | $ 32,986 | $ 49,479 | $ 49,479 | $ 49,479 | $ 49,479 | $ 49,479 | $ 49,479 |
| NP6 | $ - | $ - | $ - | $ - | $ - | $ - | $ 49,479 | $ 49,479 | $ 49,479 | $ 49,479 | $ 49,479 | $ 49,479 |
| *Total* | $ - | $ - | $ 16,493 | $ 82,465 | $ 164,930 | $ 230,902 | $ 296,874 | $ 296,874 | $ 296,874 | $ 296,874 | $ 296,874 | $ 296,874 |

**Annual budget impact PBI program expansion**

| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|---|---|---|---|---|---|
| Expansion | $ 98,958 | $ 989,580 | $ 1,187,496 | $ 1,187,496 | $ 1,187,496 |

**Option 3 (2012-2014)**

Large Projects

| | Year 1 | | | | Year 2 | | | | Year 3+ | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| NP1 | $ - | $ - | $ 98,958 | $ 148,438 | $ 148,438 | $ 148,438 | $ 148,438 | $ 148,438 | $ 148,438 | $ 148,438 | $ 148,438 | $ 148,438 |
| NP2 | $ - | $ - | $ - | $ - | $ 98,958 | $ 148,438 | $ 148,438 | $ 148,438 | $ 148,438 | $ 148,438 | $ 148,438 | $ 148,438 |
| *Total* | $ - | $ - | $ 98,958 | $ 148,438 | $ 247,396 | $ 296,876 | $ 296,876 | $ 296,876 | $ 296,876 | $ 296,876 | $ 296,876 | $ 296,876 |

Medium Projects

| | Year 1 | | | | Year 2 | | | | Year 3+ | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| NP1 | $ - | $ - | $ 16,493 | $ 49,479 | $ 49,479 | $ 49,479 | $ 49,479 | $ 49,479 | $ 49,479 | $ 49,479 | $ 49,479 | $ 49,479 |
| NP2 | $ - | $ - | $ - | $ 32,986 | $ 49,479 | $ 49,479 | $ 49,479 | $ 49,479 | $ 49,479 | $ 49,479 | $ 49,479 | $ 49,479 |
| NP3 | $ - | $ - | $ - | $ - | $ 49,479 | $ 49,479 | $ 49,479 | $ 49,479 | $ 49,479 | $ 49,479 | $ 49,479 | $ 49,479 |
| NP4 | $ - | $ - | $ - | $ - | $ 16,493 | $ 49,479 | $ 49,479 | $ 49,479 | $ 49,479 | $ 49,479 | $ 49,479 | $ 49,479 |
| NP5 | $ - | $ - | $ - | $ - | $ - | $ 32,986 | $ 49,479 | $ 49,479 | $ 49,479 | $ 49,479 | $ 49,479 | $ 49,479 |
| NP6 | $ - | $ - | $ - | $ - | $ - | $ - | $ 49,479 | $ 49,479 | $ 49,479 | $ 49,479 | $ 49,479 | $ 49,479 |
| *Total* | $ - | $ - | $ 16,493 | $ 82,465 | $ 164,930 | $ 230,902 | $ 296,874 | $ 296,874 | $ 296,874 | $ 296,874 | $ 296,874 | $ 296,874 |

**Annual budget impact PBI program expansion**

| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|---|---|---|---|---|---|
| Expansion | $ 346,354 | $ 2,127,604 | $ 2,375,000 | $ 2,375,000 | $ 2,375,000 |

[1] Assumes average PBI rate as of time of the 2012 RES IP.

[2] Assumes six month construction cycle from the above mentioned nomination periods (NP).

## Exhibit 4E: Flagstaff Community Power Project Budget (in $M)

| | 2012 | 2013 | 2014 | 2015 | 2016 |
|---|---|---|---|---|---|
| 2008 RES Net Funds Available [1] | $ 4.0 | $ 1.5 | $ 1.5 | $ 1.5 | $ 1.5 |
| Community Power Project Revenue Requirement [2,3] | $ 1.8 | $ - | $ - | $ - | $ - |
| 2008 RES Net Funds Remaining | $ 1.5 | $ 1.5 | $ 1.5 | $ 1.5 | $ 1.5 |
| **Community Power Project O/M [3]** | **$ 0.4** | **$ 0.2** | **$ -** | **$ -** | **$ -** |

**Notes:**

[1] Represents RES funds collected in 2008 that were unallocated by 12/31/2008 and which were not applied towards APS's 2010 RES adjustor as part of the ACC's review and approval of the APS 2010 Implementation Plan.

[2] Deployment and capital costs.

[3] Assumes APS general rate case adjudication and allocation to rate base in 2012.