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2010 Renewable Energy Incentive Program Kick-off Meeting

Agenda

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- **Welcome & Introductions**
- **2009 Year in Review**
- **Background & Ground Rules**
- **2010 Program Overview**
- **New Program Initiatives**
- **Related Items**
- **Review**
- **Questions & Answers**

2009 Year in Review

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Program Results to Date:

- Over 5,600 participants in the program
- Capacity to generate over 21 megawatts of “green” electricity.
- Over 16,000,000 kWhs displaced by solar water heaters alone
- Over \$54,000,000 in renewable energy incentives paid
- More than 2,800 PV systems installed by customers
- Over 2,600 solar water heaters installed in residences
- More than an additional \$230,000,000 of incentives reserved
- Commitments future customer installations totaling > 45 MWs

2009 Year in Review

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2009 Total Incentive Budget:

- **Residential:** Available
 - UFI \$49,300,000

- **Non-Res:**
 - UFI \$1,300,000
 - PBI (Lifetime) \$220,000,000

2009 Year in Review

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2009 Total Incentive Budget:

Residential:	<u>Available</u>	<u>Committed (Approx)</u>
• UFI	\$49,300,000	\$33,000,000
• Schools		\$16,300,000
Non-Res:		
• UFI	\$1,300,000	\$7,250,000
• PBI (Lifetime)	\$220,000,000	\$216,700,000

All Available Funds Were Committed

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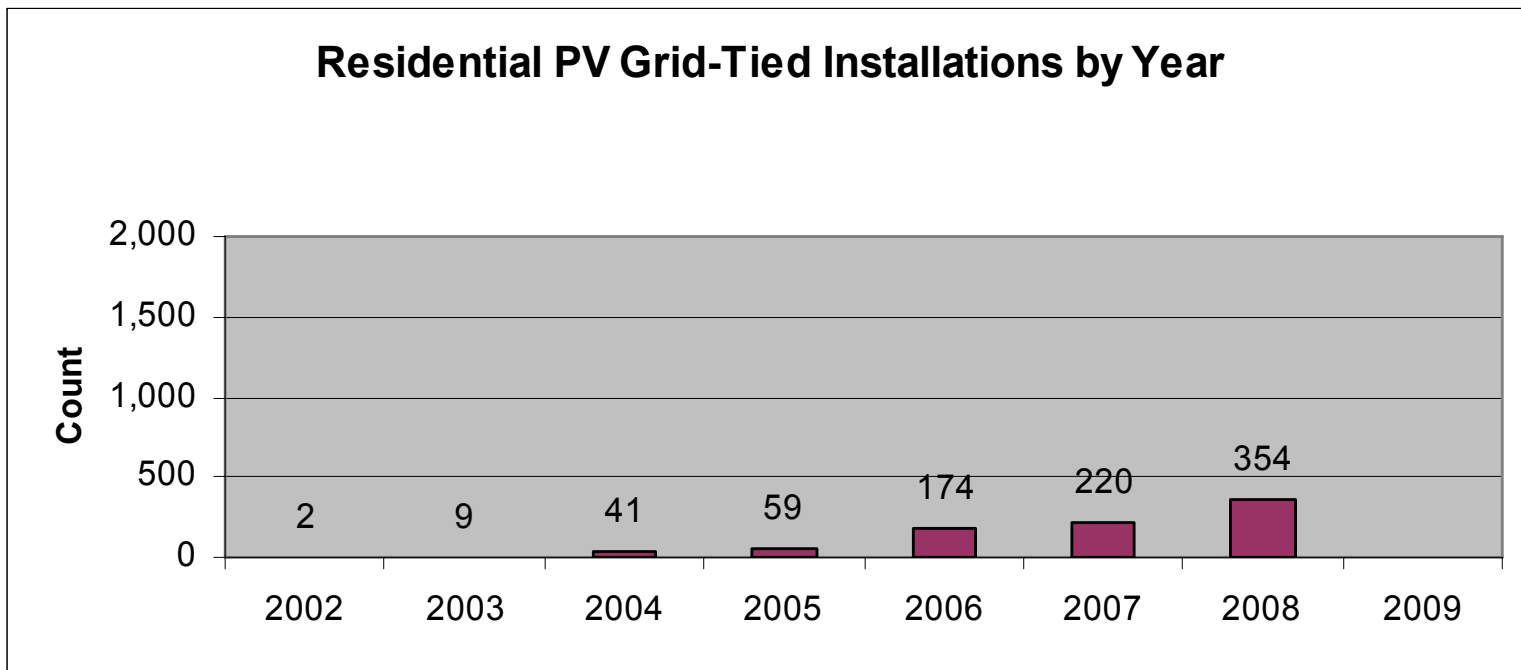
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Note: Install date is based on the date incentive check was issued

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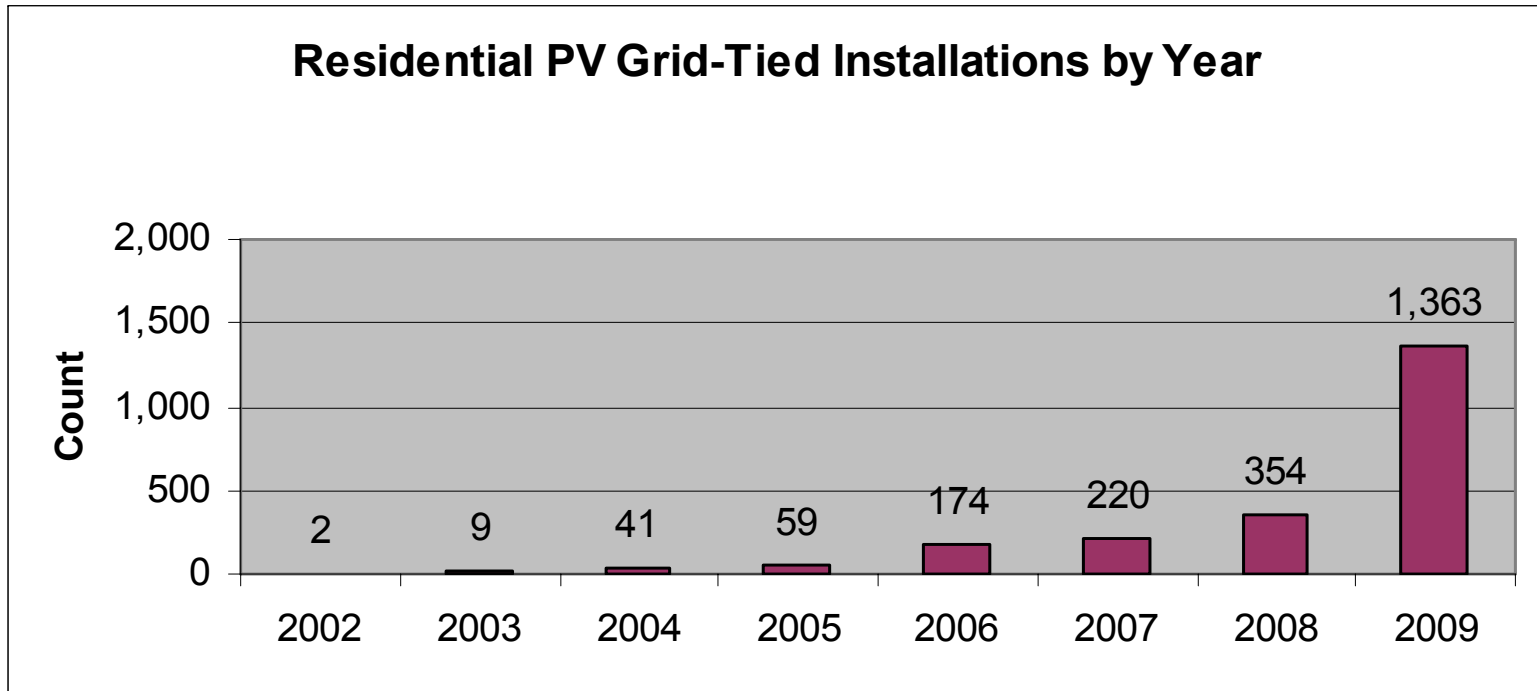
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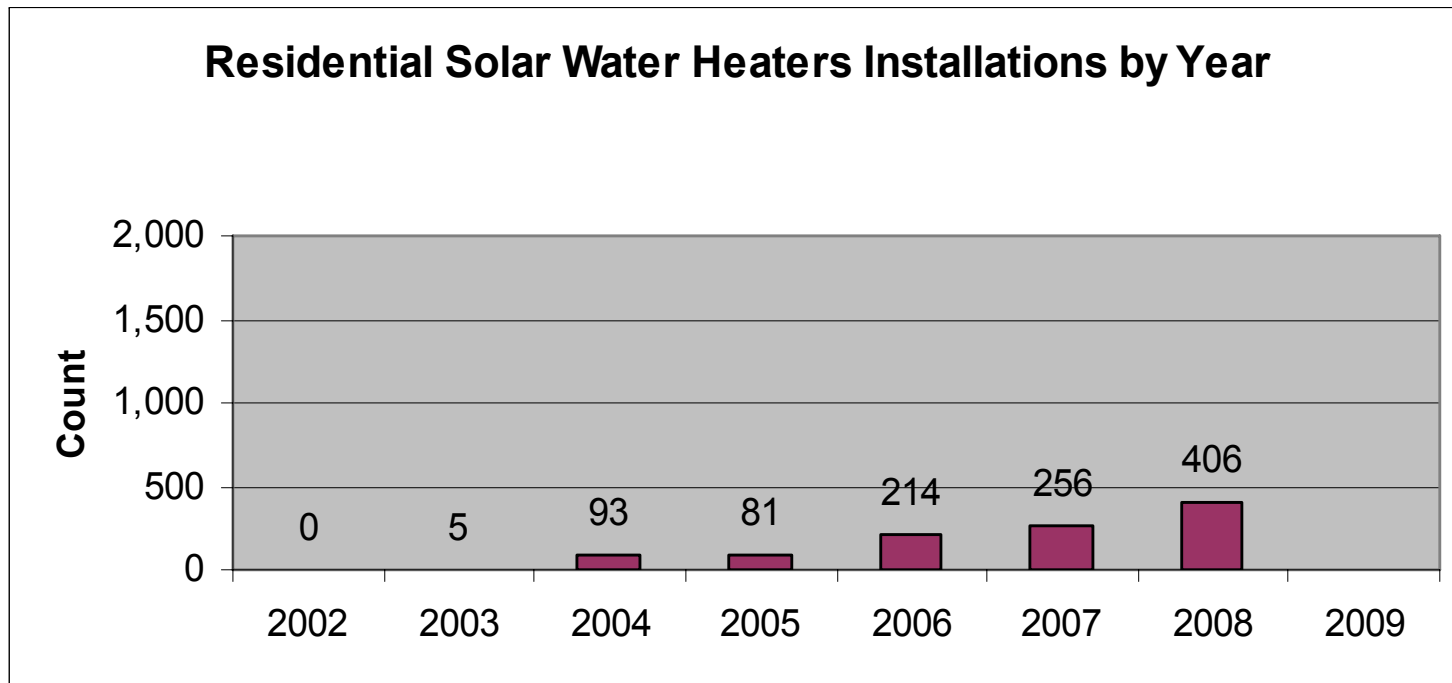
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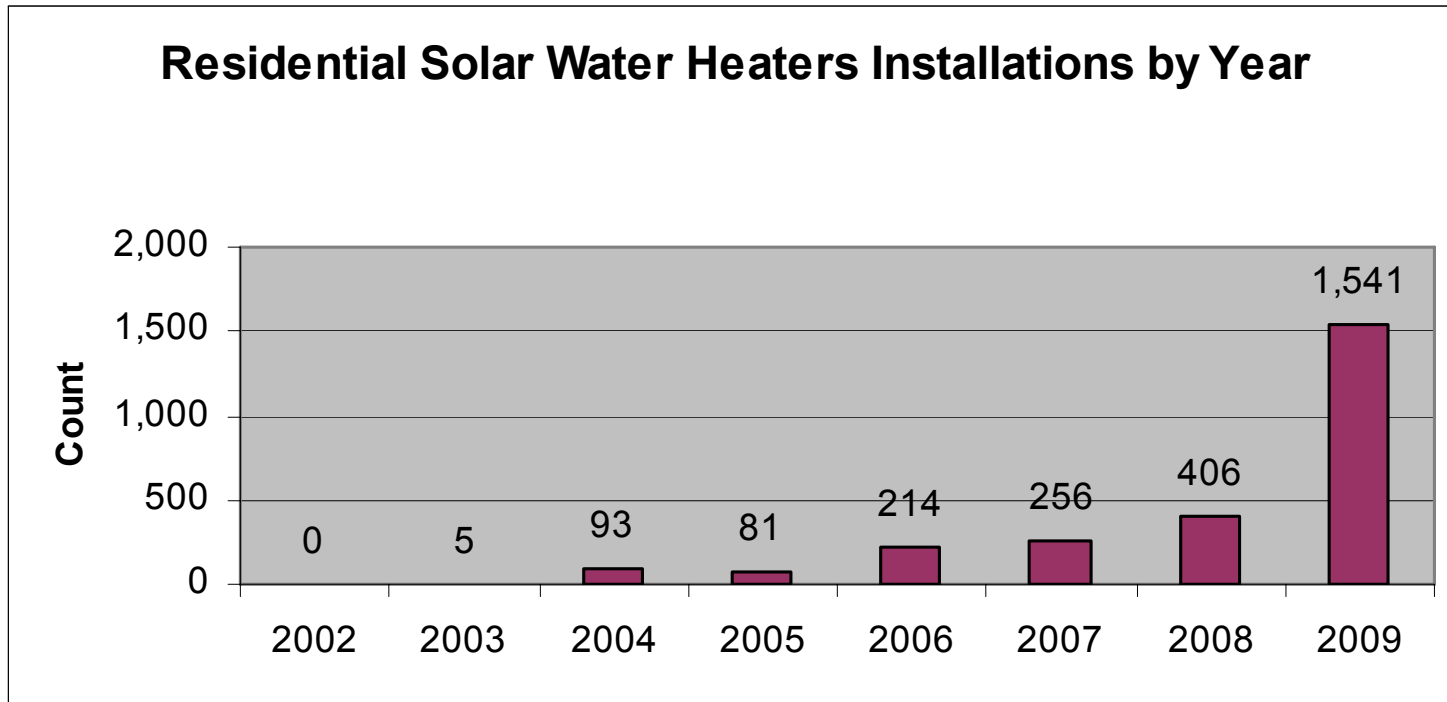
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2009 Key Statistics:

- More reservations in 2009 than 2002-2008 **combined**
- More installations in 2009 than 2002-2008 **combined**
- First seven months in 2009, averaged ~ 100 applications per month
- Last five months in 2009, averaged > **450 applications** per month
- In December, we inspected more systems than installed in **2008**
- Over two-thirds of the Dec inspections were in the **last two weeks**
- **Existing** non-res incentive commitment levels (UFI, Schools UFI, and PBI) would not only exceed 2010 compliance targets, **but exceed** **EOY 2011 compliance levels** as well (greater than 111,000 MWhs)

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Development of 2010 Program

- **Solar Partners Program**
- **Statewide Collaborative (UCPP)**
- **Renewable Energy Standard**
- **2008 & 2009 Plans, Experience, & Feedback**
- **July 1st Implementation Plan Filing**
- **October 16th Revised Filing**
- **December 22nd ACC Open Meeting**

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2010 Program is Approved

- Overview of Program
- Timing of Applications & Allocations
- Selection and Ranking of Projects
- Redesign or Debate
 - Offerings
 - Incentive Levels
 - Requirements
- Hold Questions to Q&A

2010 Program Overview

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Renewable Energy Standard – Arizona Corporation Commission

- By 2025 – 15% of APS Retail Sales (6,525,000 MWHs)
 - 70% - Renewable Generation (Utility Scale)
 - 30% - Distributed (Customer Side of the Meter – 2,000,000 MWHs)
 - » 50% Residential – 50% Non-Residential
- In 2008 – 1.75% of APS Retail Sales (516,000 MWHs)
 - 90% - Renewable Generation (Utility Scale)
 - 10% - Distributed Energy (Customer Side of the Meter – 55,000 MWHs)
 - » 50% Residential – 50% Non-Residential
- In 2009 – 2.0% of APS Retail Sales (586,666 MWHs)
 - 85% - Renewable Generation (Utility Scale)
 - 15% - Distributed Energy (Customer Side of the Meter – 88,000 MWHs)
 - » 50% Residential – 50% Non-Residential
- **In 2010 – 2.5% of APS Retail Sales (734,402 MWHs)**
 - **80% - Renewable Generation (Utility Scale)**
 - **20% - Distributed Energy (Customer Side of the Meter – 146,880 MWHs)**
 - » **50% Residential – 50% Non-Residential**

2010 Program Overview

Total DE Requirement of 146,880,000 kWhs

Residential 73,440,000 kWhs & Non-Residential 73,440,000 kWhs

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Segment	Budget	Incentive Type	Allocation Period
Residential	\$44.1 Million	Up-Front Incentive	First-come, First-reserved
Non-Residential			
<i>Large Projects</i>	\$65 Million of Lifetime Commitment	Production Based Incentive	Competitive -Two periods: 3/1 & 9/1
<i>Medium Projects</i>	\$20 Million of Lifetime Commitment	Production Based Incentive	Competitive - Six periods: Bi-monthly
<i>Small Projects</i>	\$2 Million	Up-Front Incentive	Competitive - Six periods: Bi-monthly
<i>Schools & Governmental</i>	\$15 Million of Lifetime Commitment	Production Based Incentive	First-come, First-reserved

Total of \$62,700,000 of Incentives are Available in 2010

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Residential Offerings (first-come, first-reserved):

- **PV:**
 - GT: Up to \$3.00/dcWatt
 - OG: Up to \$2.00/dcWatt
- **Solar Thermal:**
 - SWH Up to \$0.75/first year's kWh savings (OG-300)
 - SH Up to \$0.75/first year's kWh savings (ES&D)
- **Wind:**
 - GT: Up to \$2.50/dcWatt
 - OG: Up to \$2.00/dcWatt
- **Geothermal:**
 - Electric: Up to \$0.50/watt
 - Thermal: Up to \$1.00/first year's kWh savings (ES&D)

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Non-Residential Up-Front Incentives:

- Competitive
- Up to \$75,000 of incentives per customer meter per calendar year
- Up to 50% of project cost
- Six bi-monthly allocation periods (approximately \$333k available during each period)
- Projects are scored and ranked using the APS Ranking Calculator
- You may request up to the maximum amount listed on the **APS Non-Residential Incentive Chart**, but the most competitive projects are funded first
- We will not be able to fund all projects in any given period
- If reservation is accepted, a Credit Purchase Agreement must be signed by the customer within 30 days.

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UFI INDEX CALCULATOR	
Criteria	
Technology (Select)	Solar
Technology Type (Select)	Solar: Water Heating OG 100
Estimated Annual Production or Displacement (kWh)	32,000
Total Project Cost (\$)	\$ 20,000
Requested UFI \$/kWh [Maximum Value: \$0.45]	\$ 0.45
UFI Ranking Index Value	156

Your total incentive payment is capped at 50% of the project cost. Your total incentive payment is \$10,000

http://www.aps.com/_files/solarRenewable/UFI_Calculator.xls

Calculator Steps:

1. Select fuel source
2. Select technology
3. Enter estimated annual production
4. Enter total project cost
5. Enter up to the maximum allowed incentive for your project
6. Place the UFI Ranking Index Value on your application

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Schools and Governmental Program:

Qualifying customers:

- Publicly funded K-12 schools (including publicly funded charter schools)
- State and local governmental facilities that are regularly accessed by the general public (e.g. Libraries, City Halls, Admin Buildings, Police, and Fire Stations)

Available Funding:

- \$15 million of lifetime production based incentive commitments
- First-come, first-reserved basis until depleted
- The per kWh incentive is the maximum allowed incentive as listed under the **APS Non-Residential Incentive Chart** (amounts vary per technology and applicable contract term).
- Any single project is limited in size to 300 kWac or \$1.5 million in lifetime incentive payments.
- School districts or municipalities are limited to three projects during the calendar year.
- Participants are also required to install kiosks, displays or other appropriate signage for awareness and education purposes.

How to apply:

- Complete a **Production Based Incentive Reservation Request**
- Write "Use Schools/Gov't Program Funds" at the top of your application.
- Request the maximum \$/kWh amount allowed based on the technology/term as applicable.

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Non-Residential Production Based Incentives

- New to 2010: Two Size Categories
 - Medium –
 - Size: Incentives greater than \$75k and less than 100kWac or less than a lifetime commitment of \$2.5 million
 - Allocation Periods: Six bi-monthly (approx \$3.3 million available for each period)
 - Cap: 60% of Total Project Cost
 - Large –
 - Size: greater than 100kWac and less than 2 MWac (per meter per calendar year) or greater than a lifetime commitment of \$2.5 million
 - Allocation Periods: Two; 3/1 & 9/1 (approx \$32.5 million available for each period)
 - Cap: 60% of Total Project Cost
- Projects are scored and ranked using the APS Ranking Calculator
- You may request up to the maximum amount listed on the **APS Non-Residential Incentive Chart**, but the most competitive projects are funded first
- If reservation is accepted, a signed Credit Purchase Agreement along with a Developer Contract must be provided by the customer within 30 days

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PBI INDEX CALCULATOR

Criteria

Incentive Terms (Select)	20-year PBI, 20 year REC
Project Cost (\$) (includes financing if applicable)	\$ 700,000
Estimated Annual Production (kWH)	160,000
Renewable Fuel Source (Select)	Solar
Technology Type (Select)	Solar: PV Grid-Tied
Requested PBI (\$/kWH) Max Value \$ 0.162	\$ 0.1489
PBI Ranking Index Value	1,493

Your total incentive payment is capped at 60% of the Total Project Cost. Your total incentive payment is \$420,000

http://www.aps.com/_files/solarRenewable/PBICalculator.xls

Calculator Steps:

1. Select incentive terms
2. Enter total project cost
3. Enter estimated annual production
4. Select fuel source
5. Select technology type
6. Enter up to the maximum allowed incentive for your project
7. Place the PBI Ranking Index Value on your application

New Program Initiatives

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Planned Improvements

- Residential Interconnection Applications (Now)
- Residential Interconnection Inspections (Now)
- Timing of Bi-Directional Meter Sets (Q1)
- Inspections of Solar Water Heaters (Q1/2)
- Qualified Contractors Program – Residential (Q1/2)
 - Solar Electric
 - Solar Thermal
- Non-Profit Marketing Entity - Smart Power (Now)

New Program Initiatives

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Planned Improvements (cont'd)

- **On-Line Reservation System (DistGen2): Residential**
 - **Release 1 (Early April)**
 - **On-Line Forms (Res Apps, Int Apps, Install Cert)**
 - **Rule Based (Real-time: Logged & Reservation Approval)**
 - **Coordinated Work Flow (Proactive Communications)**
 - **Release 2 (Late June)**
 - **Project Tracking (Customer & Contractor)**
 - **Up-Load Documents (Drawings, Green Tags, etc.)**
- **Solar Calculator & Rate Optimization Tool (Q3/4)**
- **APS Energy Star and Solar Homes Program (Now)**
- **Statewide Utility Renewable Website (Q4)**

Related Items

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- **Production vs. Consumption**
- **Rate Options & Eligibility**
- **Time Frames – Agreements & Milestones**
- **Incentive Calculations – 50% of Total Project Cost**
- **End-of-Year Deadlines**
- **Transition**

Review

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<i>Schools & Governmental</i>	\$15 Million of Lifetime Commitment	Production Based Incentive	First-come, First-reserved

- Non-res funds are limited – Competitive – Not all customers will receive
- Several **KEY** Program Improvements Initiatives Planned for 2010
- www.aps.com/gosolar
- Residential: dg_interconnect@aps.com Gary Ellars (602) 371-5137
- Non-Res: Deb Sapp (602) 250-3465
Rex Stepp (602) 250-3043

Questions & Answers

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Thank you for attending!!!