Utility Program Support for Advanced Buildings in AZ

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Utility Demand-Side Management

• Programs funded by ratepayers and approved by the Arizona Corporation Commission, to assist customers of regulated utilities (operated by APS, TEP, Unisource, Southwest Gas)

• SRP programs approved by SRP Board and management

• DSM programs include residential new construction and C&I new construction (major remodeling is included in these programs)
What do DSM programs offer?

• Targets or tiers for energy savings (eligibility)
• Financial incentives for customers or builders
• Technical assistance, design assistance
• Customer education
• Sales support and marketing
• Training
• See Information Resources handout for more information and utility web sites
APS Residential New Construction

• Energy Star Homes
  - Based on the 2006 Energy Star standard
  - 15-20% more energy efficient than the 2006 IECC
  - Includes
    • HVAC
    • Windows/Thermal envelope
    • Lighting/Appliances
    • Performance testing and inspections

• Builder incentives = $400/home
• Builder/Realtor training and sales assistance
• Consumer information
• Considering a second tier, high performance
Guarantee Home Program (TEP)

- Uses Integrated Building Science
- 50% of the market share in TEP’s service territory
- Guaranteed Heating / Cooling Costs and Comfort
- Lower electric rate
- Determine heating & cooling usage

![Energy Usage per Month Graph]

- Base (Non-Heating and Cooling)
- Heating and Cooling
SRP Power Wise Homes

- Two tiers of energy efficiency
- Builder incentive of $400 per home plus additional incentive based on Contribution in Aid of Construction (CIAC) payment
  - Tier 1: additional incentive of 50% of CIAC
  - Tier 2: additional incentive of 100% of CIAC
- In 2009, total Tier 2 incentive of about $1,000
- In 2010, total Tier 2 incentive of about $1,600
Unisource Energy

• In Kingman and Mohave areas, working with developers
  – Reductions in utility infrastructure costs (incentive)
  – CCRs and development standards

• Recently ordered by the Arizona Corporation Commission to develop a near-zero energy home pilot as a second/higher performance tier (likely coming for other utilities as well)
C&I New Construction Programs

• Similar program offerings as residential programs
• Greater emphasis on design and design assistance
• Very early identification of potential projects/lead generation
• Prescriptive and custom incentives
Example: APS DSM Offerings for C&I

Prescriptive: Order off the Menu
- Small and large customers can choose from a prescriptive list of typical energy efficiency measures with fixed rebate levels. These apply to existing buildings (retrofit) and new construction projects.
- Lighting rebates range from $1.75 to $75 per unit
- Refrigeration rebates range from $5 to $200 per unit
- Motors and VSD rebates range from $1.50 to $50 per horsepower
- Cooling rebates include a base incentive plus efficiency incentive

Custom: Create Your Own
- Custom incentives are available to large business customers for energy-saving projects not included in the list of qualified prescriptive measures. The rebates apply to retrofit and new construction projects and are funded at $0.11/annual kWh savings. (Some utilities offer design incentives, $ per unit reduction in watts/sf.)

Energy Studies: Take a Closer Look
- Energy Study incentives provide partial reimbursement of feasibility studies, design assistance, commissioning and retro-commissioning services for new or existing facilities. Large business customers can apply for up to 50 percent of the qualifying study cost.
Utility Support and Training for Building Energy Codes and Beyond Code

• Utility support and training
  – Technical assistance and information
  – Support training for building officials, inspectors, and energy raters

• Utility advocacy for building codes and standards
  – Supporting local building energy codes
  – State legislation, goals and standards