

Energy Efficient New Homes

SWEEP 3rd Annual Energy
Efficiency Workshop
November 16-17, 2006



Presented by: Eileen Jacobson

UniSource Energy Services Gas and Electric Utility

UNS Electric 2006 Customer Count

Kingman – 34,589

Lake Havasu – 38,939

Santa Cruz – 19,784

Total Customer Count – 93,311

5-Year Average Growth Projections

Kingman – 9%

Lake Havasu – 4.1%

Santa Cruz – 3.2%

*All numbers are estimations

Growth and Development

210,000 units in various phases of development

- Single family dwellings – stick built
- Mobile homes
- Multi-family
- Commercial

Mega - Developers

Rhodes Homes

Golden Valley South	32,800
Peacock Highlands	32,000
Village at White Hills	20,000
Retreat at Temple Bar	19,000
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	103,800

Mardian

White Hills Central	14,300
Ranch at Red Lake	5,600
Ranch at Temple Bar	5,200
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	25,100

Laughlin Ranch	30,000
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	158,900

Utility Opportunities and Responsibilities

- Promote energy efficiency in new home construction
- Local Builders vs. Production Builders
- Creative approaches with limited budget
- Revitalize AZ Corporation Commission approved Residential New Construction Program
- Lay the groundwork for a new homes program that can grow with anticipated funding level increases

The Challenge

\$175,000

Additional Challenges

- Lack of energy code
- Diversity
 - Geographics
 - Climates
 - Culture
- Resources
- Limited budget = limited incentives

Residential New Construction Program

- Market assessment to determine baseline
- Evaluations to include gas savings
- Energy Star vs. homegrown program
- Developed UES Energy Smart Homes
- How much will it cost?
- Benefits to builders
 - Market differentiation
 - Program evolution

UES Energy Smart Homes

- Key Elements

- 14 SEER
- Low-e windows
 - U-Value ≤ 0.50
 - SHGC ≤ 0.40
- R-17, R-30
- R-6 Duct
- 7% Duct Leakage

- Savings

- Kingman – 2555 kWh, 1.65 kW
- Lake Havasu – 3323 kWh, 1.61 kW

Creative Approaches with Developers

- Reduction in infrastructure costs
- Language in CCR's

Thank You!

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