

# Increasing Appliance Energy Savings by Looking Beyond ENERGY STAR®

## One Utility's Perspective

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## Overview of Presentation

- Purpose
- Background on SMUD
- Clothes Washers
- Refrigerators
- Lessons Learned
- Conclusions

## Purpose

Discuss experience and lessons learned from promoting appliances beyond ENERGY STAR®.

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## Background

- SMUD a public-power electric utility
- Sacramento County, CA
- 2.3 million people
- 490,000 residential customers
- 2004 energy-efficiency budget: \$15M
- Promoting energy efficiency since 1976
- Promoting EE appliances since 1990

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## Appliance Efficiency Program

### **2004 Program Highlights**

- Clothes washers
  - \$75/\$125 rebates
  - 350 units
- Room AC
  - \$50 rebates
  - 400 units
- Total rebate budget: \$59,200
- Marketing/advertising budget: \$18,280

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## Clothes Washers

### **SMUD's CW Market**

- 40,000-45,000 single-family with electric water heating (10-15% of all SF homes).
- Approx. 95% have CWs.
- Approx. 3,000-3,500 annual potential new and replacement.

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## Clothes Washers, cont'd

- SMUD supported CEE's Residential Resource-Efficient CW Initiative in Sept. 1993.
- Offered rebates beginning in 1994.
- Rebates based on CEE tiers:

	EF	WF	RMC	Rebate
Base	1.18	13.3*	62%*	---
A1	2.50	11.0	NA	\$75
A2	3.25	9.5	NA	\$100
B1	2.50	11.0	50%	\$125
B2	3.25	9.5	50%	\$150
C1	2.50	11.0	40%	\$150
C2	3.25	9.5	40%	\$175

\* Avg. for CWs ca. 1996. No federal minimum-efficiency standard.

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## Clothes Washers, cont'd

- In 1999, SMUD condensed rebate tiers:
  1. ENERGY STAR + water factor (WF).
  2. Higher level of energy efficiency and water efficiency.

	Rebate	1999-2001			2002-2003		2004	
		Min. EF	Max. WF	RMC	Min. MEF	Max. WF	Min. MEF	Max. WF
Fed. Std.		1.18	---	---	0.817	---	1.04	---
E Star		2.50	---	---	1.26	---	1.42	---
Tier 1*	\$75	2.50	11.0	---	1.26	11.0	1.42	9.5
Tier 2**	\$125	3.25	9.5	50%	1.60	8.5	1.60	8.5

\* Equivalent to CEE Tiers A1, A2, B1, C1.      \*\* Equivalent to CEE's Tiers B2 and C2.

- Annual participation:
  - 350-450 units
  - 80-90% at Tier 2

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## Refrigerators

- 1990-1996, SMUD rebates resulted in over 100,000 new, EE units sold.
- Over 80,000 old units recycled.
- Rebates ended in 1996.
- Late '90s:
  - CEE adopted SEHA. Tier 1  $\geq$  30% federal std.
  - ENERGY STAR  $\geq$  20% federal standard.
  - CA IOUs adopted EStar as “platform” for rebates.
  - SMUD re-instituted rebates for refrigerators 6/99.

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## Refrigerators, cont'd

- SMUD refrigerator rebates 1999-2000:

	Minimum Efficiency*	Rebate	Program Market-Share Results		
			2nd Half, '99	1st Half, '00	2nd Half, '00
Tier 1**	$\geq$ 20%	\$25	24%	25%	11%
Tier 2	$\geq$ 25%	\$75	60%	53%	24%
Tier 3***	$\geq$ 30%	\$125	16%	22%	65%

\* Relative to the 1993 federal minimum-efficiency standard.

\*\* ENERGY STAR efficiency requirement.

\*\*\* CEE's SEHA Tier 1 efficiency requirement.

- Nearly 7,600 units sold.
- Trend to higher efficiency.
- New DOE std. ( $\geq$  20%) effective 7/1/01.
- New EStar std. ( $\geq$   $\approx$ 30% of '93 DOE std.,  $\geq$  10% of '01 DOE std.) effective 1/1/01.
- 10,000 rebates in 6 months to jump-start new EStar.

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## Lessons Learned

1. Promote ENERGY STAR® generally.
2. Minimize number of rebate levels.
3. Keep messaging and explanations simple.
4. Use disclaimers as necessary.
5. Keep utility's customer-service staff well-trained.

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## Lessons Learned, cont'd

6. Visit retailers frequently.
  - Keep retailer sales staff well-trained.
  - Maintain in-store marketing materials.
  - Maintain current qualifying-product list.
  - Keep retailers supplied with rebate forms.

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## Conclusions

Promoting higher levels of efficiency –

- is do-able.
- helps move the market.
- works better regionally, best nationally.
- is aided by the ENERGY STAR® “platform.”
- requires care and support in marketing:
  - keep it simple.
  - seek to minimize confusion.
  - provide field support.