

ENERGY EFFICIENCY PROGRAMS

PRESENTED TO

Arkansas Energy Efficiency Collaborative

SEPTEMBER 11, 2006
LITTLE ROCK, ARKANSAS



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BACKGROUND ELECTRIC EFFICIENCY PROGRAMS

- **Policy Drivers**
 - Clear Air Act
 - Continuation of Energy Efficiency in Competitive Environment

- **Policy Implementation**
 - State Statute
 - Public Utility Regulation



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BACKGROUND

ELECTRIC EFFICIENCY PROGRAMS

- Retail competition in ERCOT began January 1, 2002 for investor-owned utilities (Senate Bill 7 – 1999 session)
- SB 7 also required utilities to conduct energy-efficiency programs
- Competition delayed in other areas
- Adequate supply of generating capacity



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ENERGY EFFICIENCY PROGRAMS



- Senate Bill 7 (1999 session) required utilities to conduct energy-efficiency programs
- Senate Bill 5 (2001 session) required PUC to conduct energy-efficiency grant program
- SB 5 required calculation of reduction in air emissions from SB 5 and SB 7 programs



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SENATE BILL 7 ENERGY EFFICIENCY PROGRAM



- Utilities required to meet 5% of growth in demand through energy-efficiency programs by January 1, 2003 and 10% of growth in demand by January 1, 2004 - five year rolling average of historical peak average of year preceding the goal year
- Standard offer and market transformation programs
- Funded by Transmission & Distribution Rate
- Objective to obtain cost-effective energy-efficiency programs from third parties



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DESIGN ISSUES

§25.181 Energy Efficiency Goal



- **Eligible Sectors**
all customers, in all customer classes, have a choice of and access to energy efficiency alternatives that allow each customer to reduce energy consumption and energy costs

- **Incentive Levels Set as a Percentage of Avoided Cost**
 - 100% for hard-to-reach customers
 - 50% for residential and small commercial customers
 - 35% for large commercial and industrial customers
 - 25% for load management programs
constrained areas commercial and industrial 35%;
residential 55%



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DESIGN ISSUES

§25.181 Energy Efficiency Goal



- **Inspection, Measurement and Verification (M&V)**
 - Deemed savings or IPMVP

- **Independent M&V Expert**

January 2006

- PUC selected an independent M&V expert
 - verify the energy and peak demand savings
 - review deemed savings
 - limited process evaluation

September 2006

- M&V expert Summit Blue completed review



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ADDITIONAL RESOURCE NEEDS

§25.181 Energy Efficiency Goal

- **Foster Development of Energy Efficiency Sector in Economy**
 - a utility may shall not be involved in directly providing customers any energy efficiency services
 - a utility may provide a list of Energy Efficiency Service Providers (EESP) participating in the utility's energy efficiency programs
 - the utility may not endorse or favor any EESP
 - the utility shall compensate EESP for energy efficiency projects in accordance with the contract and the requirements of this section
 - an individual energy efficiency service provider may not receive more than 20% of the total incentive payments available



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Useful Tips for Success

§25.181 Energy Efficiency Goal

- **Established Realistic Timeframe - Three Year Transition**
 - Pilot Program, Transition Year, Goal Year
 - 2001 Pilot Program
 - 2002 Programs to Achieve 5% Goal
 - 2003 Programs to Achieve 10% Goal

- **Considered the Existing Energy Efficiency Market**
 - Time Required to Adjust to Utility's Requirement
 - Marketing Adjustments
 - Adjust Business Plans to Meet Incremental Goals



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Independent Measurement & Verification by Summit Blue

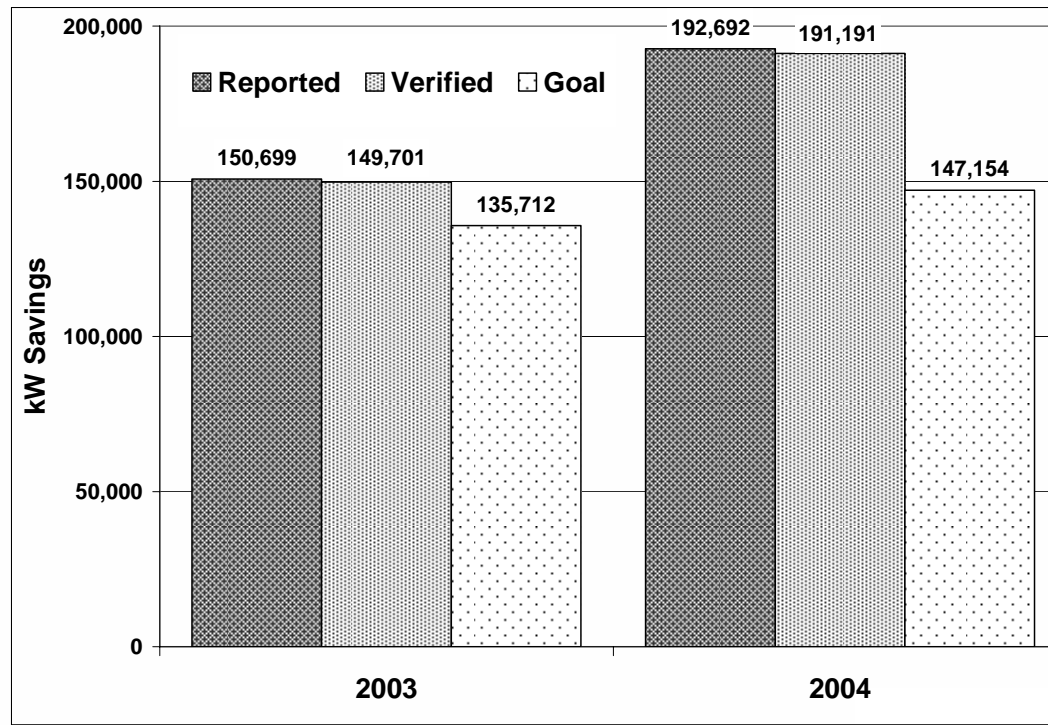


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The audit completed in 2006 verified approximately 99% of the 2003 and 2004 reported savings and found the demand savings exceeded statewide goals.

- goal + 10% in 2003
- goal + 30% in 2004
- goal + 27% (2005 non-audited)



Efficiency Program Results



- **2003**
 - 370,000 MWh
 - 150 MW
 - goal + 10%
- **2004**
 - 435,000 MWh
 - 192 MW
 - goal + 30%
- **2005**
 - 496,900 MWh
 - 181 MW
 - goal + 27%



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- Achieved results advertised at a relatively low cost
 - Standardization of estimating energy and demand savings using primarily deemed savings
 - Growing the competitive energy efficiency sector through standard offers which allow energy efficiency service providers (EESPs) creativity in structuring programs for customers
 - Standardizing contract documents
 - Synergies achieved by utilities using the same energy efficiency consultant for development of programs and database for recording and reporting savings



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For More Information

- **PUC website**

- **Statute—PURA 2005 §39.904**

- www.puc.state.tx.us/rules/statutes/index.cfm

- **Regulations—Subst. Rules
25.181, 25.184**

- www.puc.state.tx.us/rules/index.cfm



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