

ENERGY EFFICIENCY PROGRAMS

PRESENTED TO

ACEEE

AMERICAN COUNCIL FOR AN ENERGY EFFICIENT ECONOMY

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BERKELEY, CALIFORNIA



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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

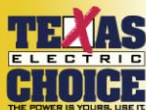


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BACKGROUND ELECTRIC EFFICIENCY PROGRAMS

- 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



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



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



SENATE BILL 5 ENERGY EFFICIENCY PROGRAM

- Utilities in non-attainment areas and affected counties apply for grants
- Utilities may use standard offer or market transformation programs
- Funded from Fees and Surcharge on Motor Vehicles
- SB 5 required calculation of reduction in air emissions from SB 5 and SB 7 programs



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 programsconstrained areas: commercial and industrial 35%, residential 55%
- **Inspection, Measurement and Verification (M&V)**
 - Deemed savings or IPMVP
- **Independent M&V Expert**
the PUC shall select an independent M&V expert to verify the energy and peak demand savings, including deemed savings, reported by energy efficiency service providers



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




ADDITIONAL RESOURCE NEEDS

§25.181 Energy Efficiency Goal

- **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

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




Environmental Benefits



EPA - EGRID

Emissions & Generation Resource Integrated Database

- integration of 24 different federal data sources on power plants and power companies
- power plant emission rates, historical relationships between the areas of power production and areas of consumption, and the primary fuel type utilized to generate electricity
- Energy Information Administration generation data to generate the value of pounds per megawatt-hour (lbs/MWh) that is a direct correlation between electrical generation and environmental quality




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SB 5 Grant Results \$3 Million Awards 2002-2003

- 220 Tons NOx Reductions / 10 Years
- Value of Saved Energy \$900,000 / Year



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SB 7 Results - 2004 \$85 Million

- 623 Tons NOx Reductions - Annual
- Value of Saved Energy \$25 Million / Year



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REFERENCE DOCUMENTS

Texas Senate Bill 7

<http://www.capitol.state.tx.us/cgi-bin/tlo/viewtext.cmd?LEG=76&SESS=R&CHAMBER=S&BILLTYPE=B&BILLSUFFIX=00007&VERSION=5&TYPE=B>

PURA Sec. 39.905. Goal for Energy Efficiency

<http://www.puc.state.tx.us/rules/statutes/Pura03.doc>

§25.181. Energy Efficiency Goal

<http://www.puc.state.tx.us/rules/subrules/electric/25.181/25.181.doc>

Energy Efficiency Implementation Project 25.184

<http://www.puc.state.tx.us/rules/subrules/electric/25.184/25.184ei.cfm>

Air Quality Plans - Texas Senate Bill

<http://www.tnrcc.state.tx.us/oprd/sips/overview.html>