



Developing a HERS Rating Infrastructure

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Outline

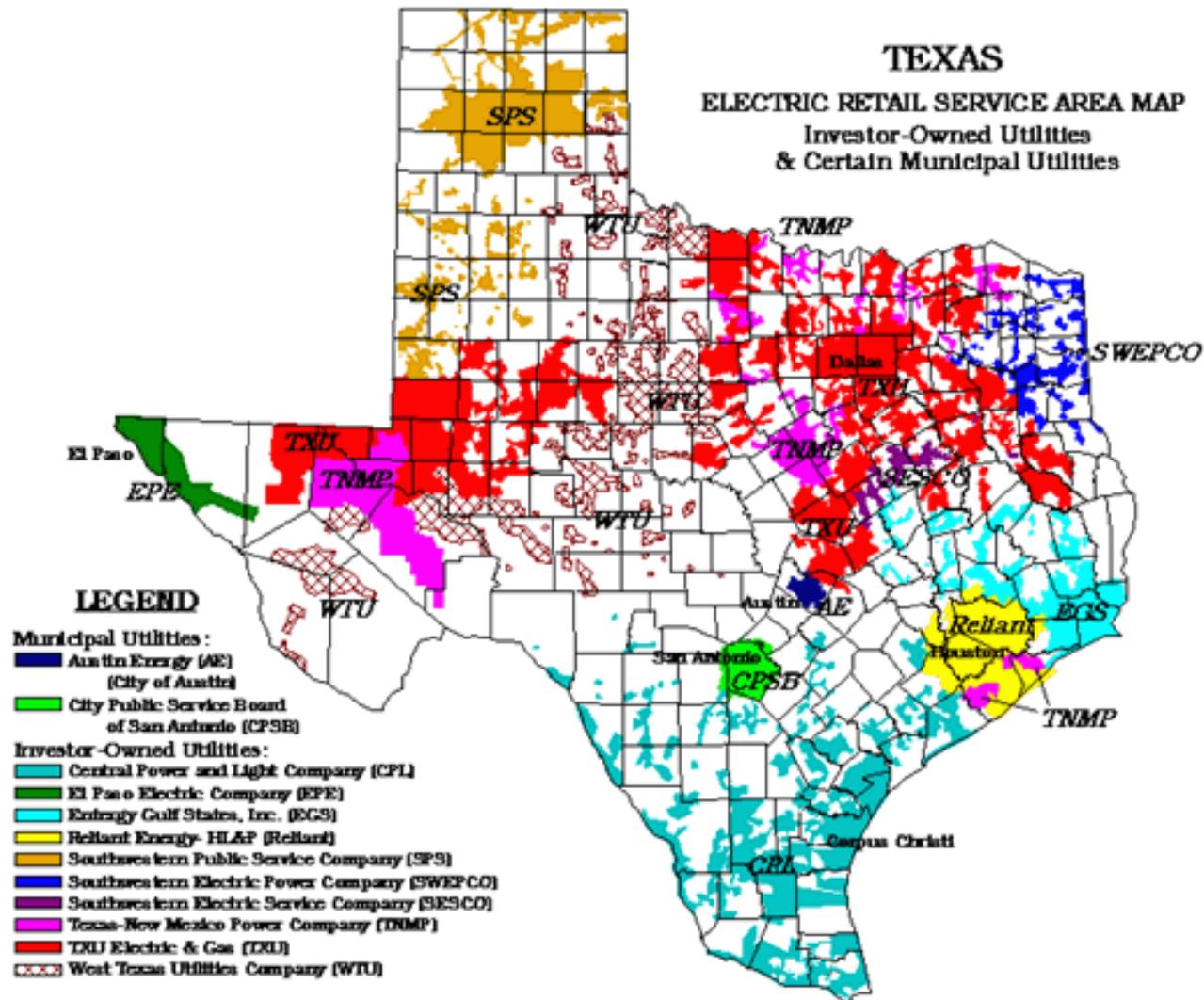
- Background
- Overview of HERS Rating Infrastructure
- Why a Market-based Infrastructure was Selected
- Steps Taken to Establish
- Advantages
- Disadvantages
- Program Results
- Lessons Learned

Background - Texas Electric Choice Act

- Utility Deregulation
- Load Growth Management
- Energy efficiency programs funded by rate payers
- ENERGY STAR Homes Program sponsored by IOU's:
 - CenterPoint Energy
 - Entergy
 - Oncor Electric Delivery Company (Formally TXU Electric Delivery)
 - Texas New Mexico Power



Background – Service Territories



Oncor's Service Territory

- Large geographic area
- More than 47,000 new homes completed each year in service territory
- Diverse markets comprised of large metropolitan areas (Dallas and Ft. Worth) and small towns (Waco, Tyler)
- Majority of homebuilders complete 100+ homes per year
 - Some complete more than 1,000 per year
- Homebuilders are extremely competitive on price and luxurious amenities

Overview of HERS Rating Industry

- Consists of HERS Rating Providers and HERS Raters
- Must complete 40 hour Residential Energy Services Network (RESNET) approved accreditation training
- RESNET accredits HERS Rating Providers
- HERS Rating Providers are responsible for certifying HERS Raters
- Only HERS Rating Providers can verify homes meet ENERGY STAR guidelines and print ENERGY STAR certificates

Overview of HERS Rating Industry

Comparison of Services offered by HERS Rating Providers and HERS Raters:

Services	HERS Rating Provider	HERS Rater
Plan Analysis	YES	YES
Technical assistance to achieve ENERGY STAR guidelines	YES	YES
On-site inspection (Blower Door and Duct Blaster)	YES	YES
ENERGY STAR Verification	YES	NO
Printing ENERGY STAR certificates	YES	NO

HERS Rating Models

Single Administrator/Implementer.

- The utility, state agency, or program administrator provides all the services of a HERS Rater and Rating Provider to verify home performance.
- Program typically covers all of the costs associated with verification.

Single HERS Rating Provider.

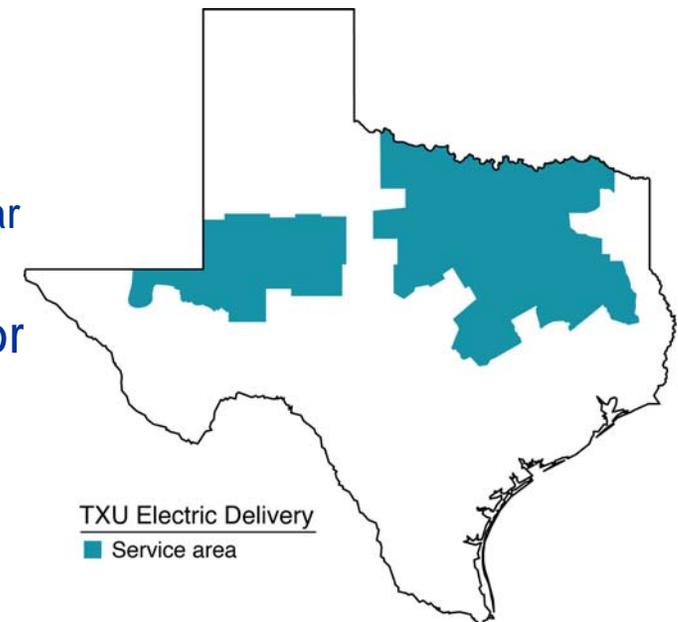
- Either a non-profit organization, company, state agency designated as the program's "preferred" rating provider.
- Can include multiple HERS Rater companies competing to provide on-site testing services, or, the preferred provider conducting all services.
- Homebuilder typically covers the costs associated with verification.

Competitive, Market-based Rating Infrastructure.

- Multiple HERS Rating Providers and HERS Raters competing in the market to provide verification services to homebuilders participating in the program.
- Homebuilder typically covers all of the costs associated with verification.

Why a Market-Based Approach?

- Aggressive energy efficiency goals
 - Goal of 7,400 kW and 24,600 MWh during first year
- Needed to offer through entire service territor
 - 88 counties and 372 cities
 - Approximately 45,000 new homes built annually



A competitive, market-based HERS rating infrastructure was viewed by Oncor and ICF as a solution to rapidly establish and expand the program to achieve aggressive goals

Steps Taken to Establish Infrastructure

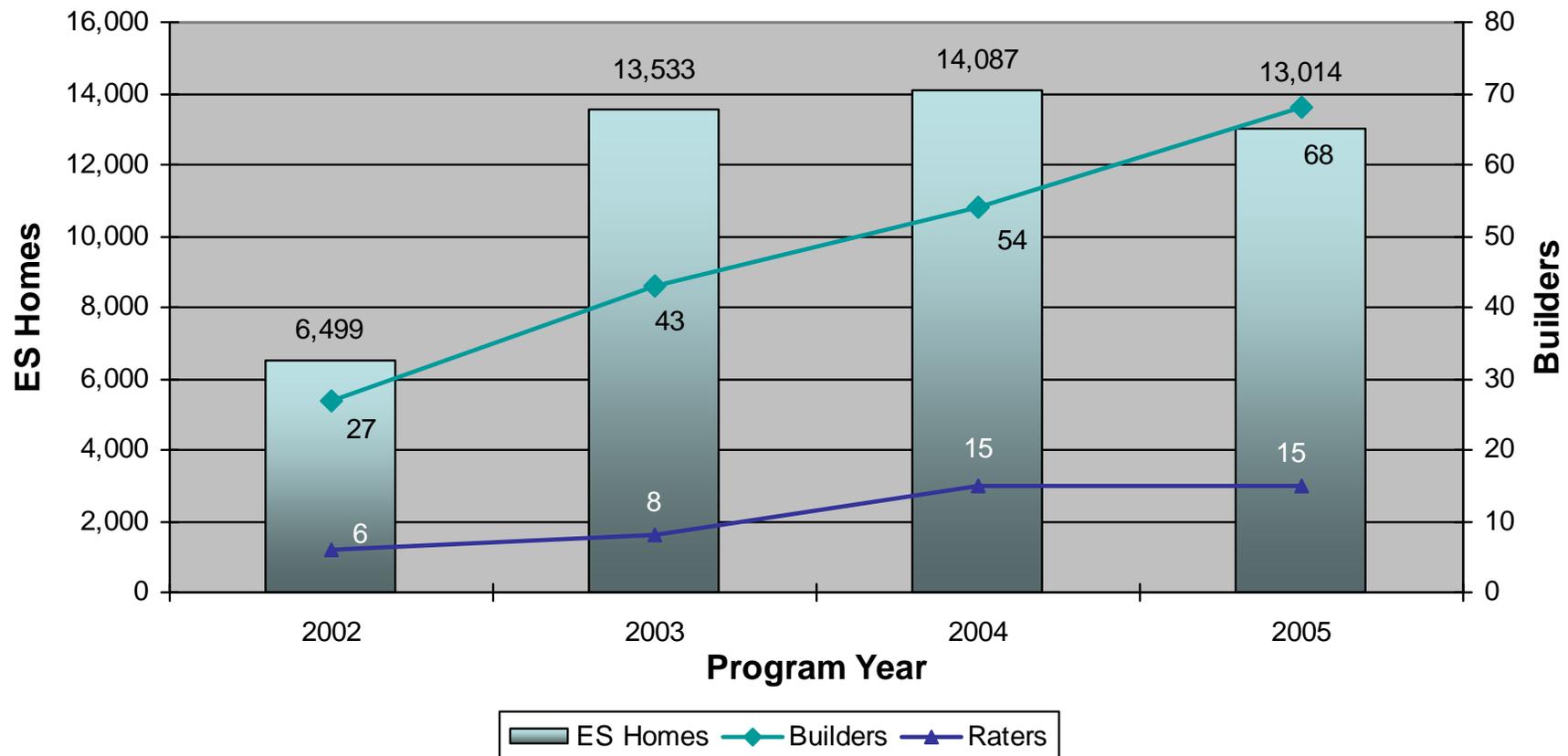
- Sponsored HERS Rater trainings to quickly deliver accredited Raters to the market
 - 11 trainings delivered, more than 160 trained
- Offered scholarships for individuals in remote areas of service territory to attend HERS Rater trainings
- Delivered trainings on how to become an accredited HERS Rating Provider and own and operate a successful rating business
- Provided turnkey tools for raters to market and sell home verification services to homebuilders
- Guided raters through the process of becoming an accredited HERS Rating Provider
- Established the Texas Home Energy Organization

Advantages

- **Quickly Established Infrastructure Needed to Support Program**
 - 15 HERS Rating Providers and 164 certified HERS Raters during first four years
- **Reduced Capital Costs and Operating Expenses**
 - Shifted the capital costs and expenses associated with operating a home verification service to the private market
 - All investments to analyze, test, and verify home compliance with ENERGY STAR was made by the private HERS rating companies
- **Allowed Utility to Focus on Critical Areas of Program**
 - Monitoring production pipelines to ensure goal is achieved
 - Recruiting and maintaining partners
 - Advancing energy performance (improving cost efficiencies)
 - Expanding program to achieve increasing annual goals
- **Achieved Rapid Expansion of Program Across Service Territory**

Advantages

Annual Delivery of ENERGY STAR Certificates and Partner Participation



Advantages

- Realized Market Improvements Through Increased Competition Between HERS Rating Companies:
 - Pre-sheet rock inspections to reduce risk of a home not passing the final verification test (prior to adoption of the Thermal Bypass Checklist)
 - Turnkey solutions for homebuilders (i.e. submit required program data to TXU Electric Delivery)
 - Performance-based pricing structures

- Reduced Risk of Achieving Annual Goals
 - Spread out risk among multiple raters
 - Reward raters who out performed competitors
 - Increase number of individuals promoting the program to builders

- Contributed to the Economic Development of the Region

- Established Foundation of Companies that Can Support Future Residential Programs

Disadvantages

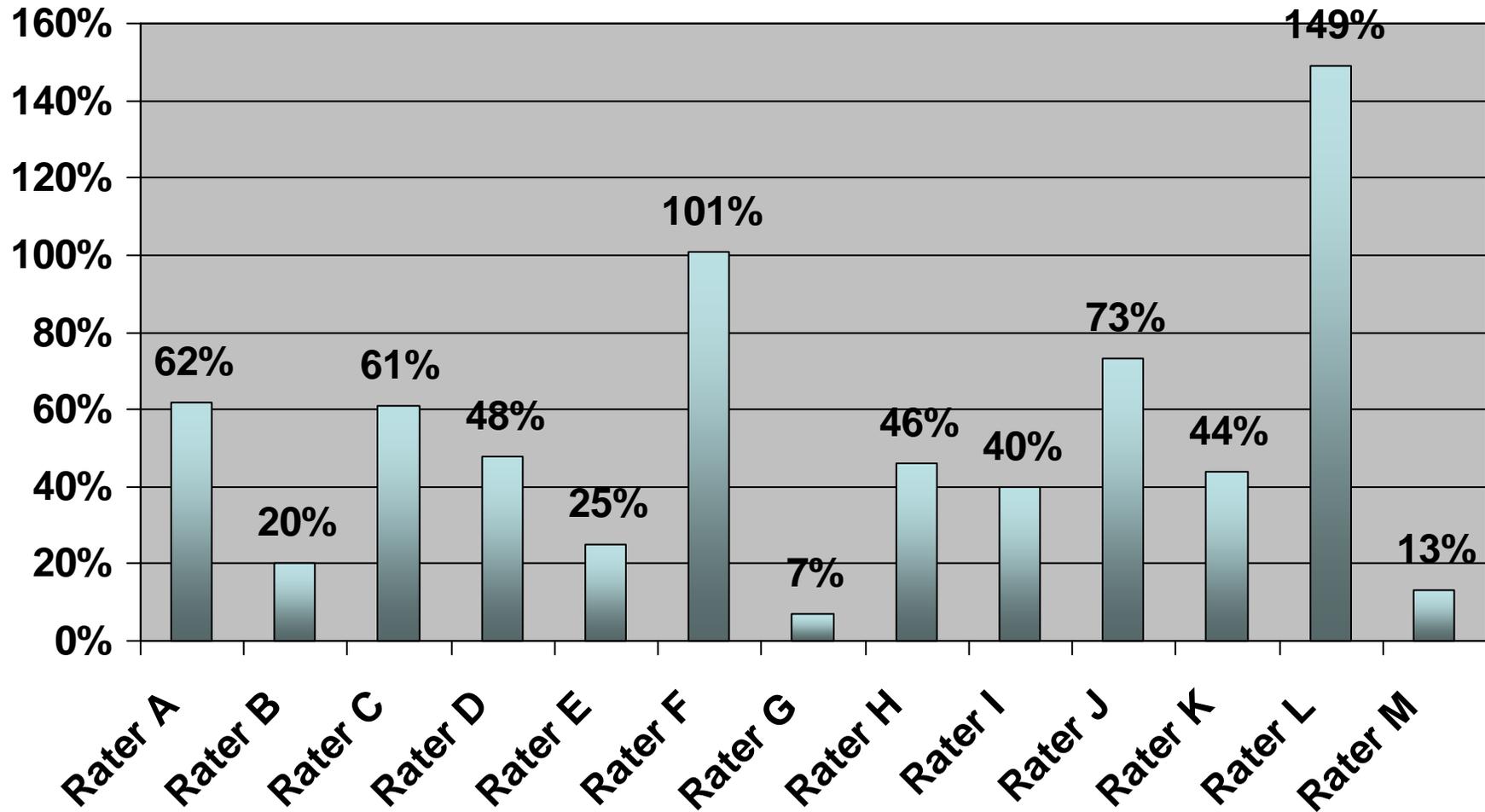
- **Increased Risk**
 - Lack of control of HERS ratings and company performance

- **Intensified Level of Supervision and Management**
 - Assist HERS Raters in becoming viable companies
 - Closely manage the activities of HERS Raters to ensure goals will be met
 - Established TXHERO to “self monitor”

- **Increased Oversight on Quality Assurance**
 - Verify HERS Raters followed RESNET guidelines and that homes meet ENERGY STAR specifications
 - 99.3% of passing rate in 2005 (2 failures out of 295 homes retested)

Disadvantages

Rater Performance
Percent of Initial Commitment Delivered to Program



Program Results

	2002	2003	2004	2005
Participating builders	29	43	54	68
Original home goal	3,000	10,000	11,000	16,000
Homes delivered	6,492	13,533	14,087	13,000
Total kWh savings (in million)	24.6	24.3	26.7	25.7
Total MW savings	7.4	29	31	29
Ave. kW / home	1.15	2.14	2.17	2.24

Lessons Learned

- A utility must closely monitor the performance of HERS rating companies to manage risks and achieve annual goals.
- Requires a significant amount of oversight to ensure annual goals are achieved, the industry continuously matures, and rating companies become self-sufficient.
- Quality of HERS ratings is not adversely affected when performed by independent and competitive HERS rating companies.
- HERS rating infrastructure can be leveraged and used for other residential energy efficiency programs (i.e. home performance).
- Allows the best HERS rating companies to prosper and grow while others slowly withdraw from the market.