Retail Competition in Texas: A Success Story

“The mission of the Public Utility Commission of Texas is to protect customers, foster competition, and promote high quality infrastructure.”

Chairman Barry T. Smitherman
Public Utility Commission of Texas
June 8, 2011
Why is fostering competition a key mission of the PUC of Texas?

Competition

• promotes diversity in offerings (different products, different customer services, different payment options, etc.);
• encourages consumers to become informed;
• enables consumers to “vote with their dollars,” providing individual feedback directly to the electric industry;
• rewards timely responses to consumer demands and changes in the economy;
• results in more efficient decisions regarding construction, operation, and eventual retirement of facilities;
• produces lower prices; and
• in Texas, has contributed to substantial investments in smart-grid tools and clean energy, creating even more options for Texans.
Background: Texas’s Transition to Competitive Electric Markets

• In 1995, the wholesale, generation market became more competitive when the Texas Legislature amended the Public Utility Regulatory Act (PURAct) to deregulate wholesale generation. Today there is wholesale competition throughout the State.

• In 1999, the Texas Legislature passed Senate Bill 7, introducing retail competition in much of ERCOT, the intrastate grid that serves 85% of Texas load.
  – S.B. 7 created a 2001 pilot project. Demand to enroll in the pilot project was so high amongst commercial and industrial classes that a lottery was held to select participants.
  – S.B. 7 took full effect on January 1, 2002 in the service areas of investor-owned utilities (IOUs) within ERCOT. About 6 million retail customers were opened to retail competition overnight.
  – A temporary price to beat (PTB) mechanism protected non-switching customers against excessive price hikes and created initial headroom for entrance of competitive REPs. Healthy competition led to the end of PTB in December 2006.
  – Currently, Provider of Last Resort (POLR) service is the only fully-regulated retail rate in Texas’s areas of competition.

• But, today, vertically-integrated monopolies remain.
  – Municipally-owned utilities and co-ops in ERCOT
  – All areas outside ERCOT
ERCOT’s Current Markets Structure

<table>
<thead>
<tr>
<th>Generation and Distribution</th>
<th>REPs</th>
<th>End Users</th>
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<tbody>
<tr>
<td>Competitive Production</td>
<td>Retail Electric Providers</td>
<td>End Users</td>
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<tr>
<td>Regulated, Open Access</td>
<td>Retail Electric Providers</td>
<td>End Users</td>
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Competitive Production
Regulated, Open Access
Competitive Sales
Competition in Texas’s Retail Market

• The Texas retail market has now been open to competition for more than nine years.

• In the 2010 ABBACUS report, an assessment of restructured electricity markets in Canada and the United States, Texas was the only jurisdiction to earn the top ranking of “Excellent” in both the Residential and Commercial/Industrial (C/I) segments.
  – Texas’s Residential segment has received an excellent ranking 4 years in a row and its C/I segment has received an excellent ranking 3 years.

• 19 new REPs entered the market in 2008 and 26 new REPs entered the market in 2009.

• In the first half of 2011, residential customers have about 2.5 times more options for service than they did at the end of 2008.
  – 50+ REPs are serving at least 500 residential customers.
  – Most retail customers may choose from over 35 REPs, offering as many as 226 different rate packages.
  – Wide range of market differentiation/evolving product offerings
  – Continue to see new entrants; limited exit
Competition in Texas’s Retail Market (continued)

• Texas retail customers may choose from diverse products.
  - Fixed
  - Indexed
  - Variable
  - 100% Green

• Texas retail customers may choose from diverse payment schedules.
  - Traditional billing months
  - Calendar months
  - Prepaid

• Texas retail customers may choose whether to participate in energy-efficiency programs, demand response programs, distributed generation programs, etc.

• Several TDUs in areas of competition are deploying smart meters, enabling competitive REPs to further differentiate themselves through offerings of in-home usage devices and, in the near future, time-of-use pricing.
Retail competition has incented clean energy investment in Texas.

**ERCOT’s Current and Projected Capacity**

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<tbody>
<tr>
<td>Current Installed Capacity</td>
<td>11%</td>
<td>6%</td>
<td>23%</td>
</tr>
<tr>
<td>2020 B.A.U.</td>
<td>53%</td>
<td>19%</td>
<td>18%</td>
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<tr>
<td>2020 Nat. Gas</td>
<td>58%</td>
<td>6%</td>
<td>7%</td>
</tr>
<tr>
<td>2020 Renewable</td>
<td>23%</td>
<td>6%</td>
<td>18%</td>
</tr>
</tbody>
</table>

Sources of underlying data: ERCOT’s Quick Facts and ERCOT’s 2010 Long Term System Assessment.
ERCOT’s Diversified Energy Portfolio

* 2011-2015 projections regarding wind energy and “other” energy are conservative because only facilities with signed interconnection agreements are included and hydro facilities are not included.

Sources of underlying data: ERCOT’s 2008 Constraints and Needs Report, ERCOT’s 2008 - 2010 Demand and Energy Reports, and ERCOT transmission planning data.
# Current Competitive Residential Retail Prices in ERCOT

<table>
<thead>
<tr>
<th>Service Area</th>
<th>Fixed-Price Offers (term of at least 3 months)</th>
<th>Variable Price Offers</th>
<th>Renewable Generation Offers (100% renewable)</th>
<th>Dec. 2001 prices (Not adjusted for inflation)</th>
<th>Dec. 2001 prices (inflation adjusted)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AEP – TCC</td>
<td>9.5¢/kWh</td>
<td>6.9¢/kWh</td>
<td>8.0¢/kWh</td>
<td>9.6¢/kWh</td>
<td>11.7¢/kWh</td>
</tr>
<tr>
<td>AEP – TNC</td>
<td>8.4¢/kWh</td>
<td>6.7¢/kWh</td>
<td>7.5¢/kWh</td>
<td>9.6¢/kWh</td>
<td>12.2¢/kWh</td>
</tr>
<tr>
<td>CenterPoint</td>
<td>8.6¢/kWh</td>
<td>5.4¢/kWh</td>
<td>7.3¢/kWh</td>
<td>10.4¢/kWh</td>
<td>12.7¢/kWh</td>
</tr>
<tr>
<td>Oncor</td>
<td>8.1¢/kWh</td>
<td>5.0¢/kWh</td>
<td>7.0¢/kWh</td>
<td>9.7¢/kWh</td>
<td>11.8¢/kWh</td>
</tr>
<tr>
<td>TNMP</td>
<td>8.3¢/kWh</td>
<td>6.6¢/kWh</td>
<td>7.2¢/kWh</td>
<td>10.6¢/kWh</td>
<td>12.9¢/kWh</td>
</tr>
</tbody>
</table>

Austin: 8.49¢/kWh (winter rate), 9.39¢/kWh (summer rate)
San Antonio: 9.43¢/kWh (January 2011 rate), 9.53¢/kWh (July 2010 rate)*

* Municipally owned utility rates are average rates for a residential customer who uses 1000 kWh.
Questions?

For this and other presentations, go to http://www.puc.state.tx.us/about/commissioners/index.cfm and follow the link for Chairman Smitherman.
Appendix Slides Hereafter
“The Competitive Edge”

• About 18 years ago, I wrote an op-ed in the Houston Chronicle about the then-collapsing Soviet economy:
  – “Where there is competition, the public gets to choose the best product at the best price; where there is not competition, the public has no choice—it either takes the product or service offered, or does without.”

• Former Texas A&M Chancellor and former FRB-Dallas President Bob McTeer once noted, “Government monopolies are usually run by good people, but competition makes them better.”
  – He was writing in favor of school choice, but his point is equally well suited to utilities.

• Whether in air travel, long-distance telephony, or interstate trucking, deregulation from state-controlled economics to competitive markets consistently leads to leaner, smarter workforces, higher utilization, and more efficient cost structure.
Retail Customers Served by Unaffiliated REPs

Residential Customers with a Non-legacy REP (by Service Territory)

Secondary Voltage Customers with a Non-legacy REP (by Service Territory)
Issues still to-be-addressed in Texas’s advanced competitive retail market

• How can information be most effectively presented so that retail customers may compare and contrast offers?

• Do the sometimes higher costs of value-added products skew the public’s perception of the success of competition?

• How can we measure “value?”
Transitioning to Competitive Retailing: the Price to Beat (PTB)

- The PTB formula at one time was January 1999 regulated retail rates, adjusted for January 2002 fuel prices, and then cut by 6%
  - Included an adjustment mechanism for increases in fuel costs

- SB7 required incumbent retailers (Affiliated Retail Electric Providers) to offer the PTB—and only the PTB—to residential and small (<1000 kW) commercial customers from Jan 2002 to Dec 2004
  - Exception: Once residential or small commercial customers representing 40% of power consumed switched to a competitor, the PTB restriction was lifted
  - All competitive areas within ERCOT surpassed the 40% threshold by late 2003 for the commercial class

- Twin Purposes of PTB
  - Protect non-switching customers against excessive price hikes
  - Create headroom for competitive REPs

- PTB remained a residential option until the end of 2006.
Transitioning to Competitive Retailing: the PTB (continued)
Transitioning to Competitive Retailing

• Initially, customers remained with the affiliated REPs (aREPs).

• The number of switching customers steadily increased, however.

• Today, Texas is recognized as the most successful competitive retail market in North America.*
  – On average, more than half of residential customers in competitive areas have chosen to be served by unaffiliated REPs.

Responsive Retail Market Oversight

During May and June 2008, high natural gas prices and transmission congestion drove up wholesale and retail electricity prices, putting financial stress on some of the REPs.

- Several of the stressed REPs left the market. Their customers were transferred to Providers of Last Resort (POLR).
- Some REPs also failed to meet their financial obligations to ERCOT or transmission and distribution utilities (TDUs).

As a result, the Commission in May 2009 amended its REP certification rules to better protect REP customers against REP insolvency.

- The amended rule requires REPs to meet higher standards for capitalization and risk management expertise.

In 2010, the Commission amended its REP certification rule again to allow the PUC to draw on a REP’s letter of credit in the event of a REP certification revocation.

- The amended rule also defines a failure to remove a switch-hold in the prescribed timeline as a significant violation of Commission rules, for which a REP may be subject to administrative penalties and/or revocation of the REP’s certification.
- And the amended rule provides for a new REP certification, allowing third-party ownership of distributed generation facilities on the business premises of large customers.

For most REPs, the amended rule requires a REP to demonstrate its financial qualifications by providing the Commission a letter of credit in the amount of $500,000 and ensuring the protection of customer deposits by putting deposits in an escrow account or covering the customer deposits with a second letter of credit for 100% of the deposit amounts.
Smart Meters

- Consumers can use the information provided by smart meters to help reduce their energy use and take part in new pricing or demand response programs.
- Smart meters also allow for customers to quickly switch to a different provider, encouraging customer choice.
- A 2010 Rolling Stone article listed smart meters as a “sure bet” of ways to “cool the planet.”
Smart Meter Deployment in ERCOT

• To date, over 3,079,000 smart meters have been deployed in ERCOT.
  – Oncor: 1,634,603
  – CenterPoint: 1,204,049
  – AEP TCC and TNC: 240,509

• Over 6 million smart meters will be deployed by the end of 2013.

• Another utility’s (TNMP’s) proposed AMS deployment is pending.

• The joint web portal, www.smartmetertexas.com, is used by consumers, REPs, and TDUs to track and manage energy use.

• Several REPs are offering products and services that utilize smart meter functionality, such as energy monitoring, time-of-use pricing, or prepaid service.
Smart Meter-related Retail Products & Services Being Offered in Texas

• In Home Devices are being installed in customers homes today:
  – Champion Energy
  – Direct Energy
  – TXU Energy
  – Reliant Energy
  – 500 IHD rollout – CNP
  – 500 IHD rollout – Oncor
• Usage Insights services
• Time of Use Rate Plans
• Electric Vehicles

• Retail Services provided remotely (avoid truck roll)
  – Switching from REP to REP
  – Disconnection, and Reconnection of Service

• 3rd Parties
  – Customers in Texas can authorize a 3rd Party to have their 15-minute data
  – Working with NAESB Data Privacy Task Force
  – Will finalize business rules in 2011
Wind Generation in ERCOT

Source: Grid Operations and Planning report provided by Kent Saathoff, May 17, 2011, ERCOT Board of Directors Meeting.
Competitive Renewable Energy Zones (CREZ)

• Texas’s CREZ Transmission Plan is the largest renewable infrastructure project in North America.
• The PUCT selected a CREZ Transmission Plan that, when completed, will have over 18,500 MW of transfer capacity, at an original estimated cost of approximately $5 Billion.
• The plan will serve to transmit electricity from five geographic areas identified as CREZs, which the PUCT designated after considering several areas’ potential for wind generation and wind generators’ demonstrations of financial commitment, to large load centers including San Antonio, Houston, Austin, and Dallas. Due to Texas’s open access transmission network, non-wind generators will benefit from the increased capacity, as well.
• After designating the CREZs and selecting the transmission plan, the PUCT conducted a contested process in which the PUCT selected transmission service providers responsible for constructing, operating, and maintaining the CREZ facilities. The PUCT selected several entities that already operated in Texas, as well as three new entrants who had never before operated transmission facilities in Texas.
The CREZ Transmission Plan

When complete, the CREZ Transmission Plan will provide more than 18,400 MW of transmission capacity.

As of May 18, 2011,

- the Commission has decided the routes for 30+ CREZ CCN docket.
- only one docket is pending and no more CCN applications remain to be filed.
- the Commission modified the plan in late 2010 because it found cost-effective alternatives to two lines.