Overview

The Electric Reliability Council of Texas (ERCOT) market is generally considered to be the most successful of the restructured retail electricity markets in North America. Customer switching rates are relatively high. Reliability has been maintained. Many of the problems that plagued the California market have been avoided.

Restructuring has achieved many policy goals. Competition has been enhanced in many segments of the market. Consumers of electricity now enjoy new choices of suppliers and services. Many industrial energy consumers appear to be enjoying lower prices for power.

However, some policy goals remain elusive. In an era of high natural gas prices, smaller electricity consumers in the competitive areas of Texas face much higher electricity prices than their neighbors in areas that have not opened to retail competition. The wholesale market will soon be further restructured as a centrally-dispatched nodal market to better address transmission congestion problems.

This paper explores the effects that Texas’ restructuring plan has had on electric rates and the degree of competition in various segments of the market in the years since competition was introduced.

Methods

In order to examine the degree of competition in the ERCOT market, the numbers of suppliers in various segments of the market will be reviewed. The concentration of suppliers in certain segments of the market is discussed. It is noted that ERCOT has the most concentrated generation sector among the competitive wholesale markets in the U.S. Customer switching rates and other metrics are reviewed to discern the degree of competition in retail sales of electricity.

Trends and levels in the price of electricity in areas of the State where competition has been introduced are compared to prices in areas where competition has not yet been launched. Comparisons for residential prices rely upon data collected by the Public Utility Commission of Texas, while comparisons of prices for commercial energy consumers are based upon a large database of prices quoted by competitive retail electric providers.

Results

In comparison to many other U.S. states, Texas has indeed been relatively successful in introducing competition into the retail level of the market. Much of this success may be traced to the creation of an open market environment to encourage investment and entry. Steps were successfully taken to ensure that competition would be “fair” for new entrants and the independent system operator assumed some unusual roles (including a “Central Registration Agent” function). Maintaining a workably competitive wholesale market remains a challenge, but Texas is taking a number of positive steps to mitigate market power as it transitions toward a nodal market structure.

At least for smaller consumers of electricity, electricity prices have increased more rapidly in areas of the State where competition has been introduced than in other areas. This is the result of a variety of factors, including 1) the policy of indexing to natural gas prices the default regulated transitional “price-to-beat” mechanism for consumers who fail to switch to a competitive retailer; 2) a
divergence between the price of natural gas (which is typically the marginal fuel for generation and sets the market clearing price of energy in the competitive wholesale market) and the prices of other fuels (which have the effect of moderating price fluctuations in the fuel factors of regulated utilities and public power entities which set generation prices based on average overall fuel costs); and 3) the higher transaction and marketing costs associated with serving small energy consumers in a competitive retail market.

Conclusions

It is hoped that the many lessons learned from Texas’ relatively successful experience with restructuring will shape restructuring initiatives in other markets.

References


Public Utility Commission of Texas (2005), Scope of Competition in Electric Markets in Texas, Report to the 79th Texas Legislature.
