

# Talking Texas Markets

Part I



PUF's Steve Mitnick with  
Pat Wood, Former FERC and Texas PUC Chair;  
Kenny Mercado, SVP, CenterPoint;  
Jim Steffes, EVP, Direct Energy;  
Ken Medlock, Senior Director, Center for Energy Studies, Rice University



**UF's Steve Mitnick:** How well are the Texas wholesale and retail markets operating now?

**Pat Wood, former Chairman of the Texas PUC and FERC:** Let's look at it from a producer side and from a customer side. As a reminder, legislation was passed in 1995 to start a Texas wholesale market, ERCOT, and in 1999 to open the retail market.

Chairman Donna Nelson of the Texas PUC put forth an exhibit last year that was widely circulated. It showed that since the retail market opening in 2002, rates had gone down in real dollars by half. Gas today is actually a little higher than it was in 2002, and as it spiked up in 2005 and again in 2008, wholesale rates ran up as well. And today wholesale rates are at all-time lows.

By and large, competition has worked as we who set it up hoped it would work in both the wholesale market and the retail market. There have been enough players in both markets to make it work. The large companies here did all the right things that we wanted them to do to enable the market. Barriers to entry were knocked down. Lot of transparency.

When I compare it to telecommunications, electricity has a way to go. But when I think about this first round of offerings: you've got over fifty companies offering renewable plans, time of day plans, affinity rewards, and different kinds of ways to do pricing, like ones that reward people for conserving. So that's pretty good, and the innovation is only just beginning on retail offerings.

Big customers will tell you when they're not happy, and, except for the price spikes in 2005 and 2008, they've been quiet for fifteen years. For smaller customers, there were some hiccups in the early years, as people were getting used to the market and customer practices were a little less friendly than they are now.

The legislature gave the PUC enough authority to regulate but not so much where they smothered the business. That balance was good. The Texas PUC has gotten that balance right over the years. Some other states have probably overcompensated for that, reacting to the last bad headline.

Texas co-ops and munis who didn't have to un-bundle at retail: they're very happy. As they see what's happening with competitive pricing in the rest of the state, they're pulling away from their historic wholesale providers. So, overall, wholesale customers and retail customers are happy.

Producer side: it's been a tough haul. It's a very competitive market. I'm chairman of Dynegy, which bought into this market last year. Those fat regulated returns the PUC used to award the utilities look real attractive these days.

Dynegy is the fourth largest generator in ERCOT today. Vistra and Dynegy have recently announced a merger, pending regulatory and shareholder approval. We do not have a large retail presence in Texas.

I think if you don't have a retail presence, it's a very difficult market in which to get any sort of profit. There's no capacity market here, so for a standalone generator, it's all got to come from the energy market. We haven't had the energy events, such as hot days, that would fill the coffers.

We have a very high price cap, so if there's a hot day and there's demand for your product you'll get paid a nice premium for it. We just haven't had those hot days since 2011. But with

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*– Pat Wood*

a retail book, you have, in effect, developed your own capacity payment system and so long as you keep your customers happy, you have a reasonable hedge for the lean years.

**Ken Medlock, Rice University:** The story of the Texas electricity market reform is an evolving one. By most accounts, a true metric for successful market reform is embodied in the price of electricity.

Wholesale market reform should be evidenced by wholesale price movements that indicate cost reductions in generation, while retail market reform should be evidenced by retail price movements that indicate cost reductions in the delivery of energy services.

A study I led on behalf of the Baker Institute Center for Energy Studies delves into this issue. In Texas, there is clear evidence that retail prices in competitive market areas have moved favorably for consumers. The story in noncompetitive areas is mixed.

**PUF:** You mentioned several factors in the way the markets are operated. I can recall some of them: highly competitive, the way that the commission dealt with bumps in the road.

**Kenny Mercado, SVP, CenterPoint:** When you look at our market, it's the largest energy-only competitive market in the world. It continues to grow in size and mature in its capability since 2001.

For the last five years, the state of Texas has had the highest growth of any state in the U.S. From my understanding, that's an indicator that we're doing something right. Along with growth,

**FIG. 1**

**TEXAS: THEN & NOW**

Generation Projects Completed in ERCOT 1995-2002: 11,737 MW      2002-2017: 52,064 MW	2002	2017
Advanced Meters Deployed (99% of ERCOT load-settled with 15-minute interval data)	0	7,000,0002
Customer Count: ERCOT Competitive Service Areas: Residential	4.9 Million	6.2 Million
Solar/Wind Generation:	Wind 977 MW	Wind 19,900 MW
ERCOT Annual Energy Usage:	Peak Demand 56,233 MW	Peak Demand 69,512 MW
Number of REPs Serving Residential Customers:	107	558
Offers for Residential Customers:	11 unique products	440 unique products (as of September 2016)

the competitive market creates opportunities for wholesale, retail and regulated companies to prosper.

When you think about residential growth, you are not going to find that type of growth anywhere in the U.S. But, we are also experiencing significant expansion in commercial, manufacturing and industrial sectors.

When you add it all together, the state is really creating a sustainable platform. Creating the fundamentals for markets to move and for businesses to come in and for jobs to be available. Most importantly, the real measurable winner is the retail consumer.

The customer is the most important component, whether it's an industrial customer, a commercial customer, or you and me here at the table, residential customers. Choice matters.

Customers want cost affordability. They want comfort. They want convenience. They want choice. They can have all that in Texas, which is different that probably anywhere else in the U.S. I think the choice factor matters more than anything else that we do in our marketplace.

**PUF:** You're in the leadership of a utility. It seems like your company's thriving?

**Kenny Mercado, SVP, CenterPoint:** Our market is a balanced approach. You try to work towards balancing the needs of retail, the needs of wholesale, and the needs of the regulated investments.

There's not one area that gets an unfair advantage over any other. We think long and hard about how we serve growth. Infrastructure, reliability and resiliency are critical to the market's success. Digital technology to support that infrastructure is very important to us. It creates this platform which drives choices and competitive opportunities for the retail community.

We see this as an excellent area for investment in Texas. The regulated model enables the competitiveness to really be successful. It's that balanced level of opportunity for all energy companies that makes it all work.

**We began our journey around 2005, when the Texas legislative decision was made that we were going to go forward with an investment in smart metering technology.**

*– Kenny Mercado*

**Jim Steffes, EVP, Direct Energy:** I give a lot of credit to the policymakers that have driven the Texas electricity market over the years. The industry has been able to keep morphing to meet the needs of the consumer. But a lot of credit goes to the T&D utilities. They have built a solid digital platform for the Texas market.

Digitization allows us to control the grid better and begins the process of deep and meaningful understanding of customer usage. Moving from twelve analog data points a year to thousands or millions of digital snapshots of our customer's energy usage is a fundamental transformation – one we need to achieve our customer's goals.

It's a two-way platform, enabling companies like mine to create product offerings designed to meet the consumer's needs, all the way down to the household level.

Importantly, our market structure allows the ability for the market to evolve. And critically, the partnership the T&D utilities have put forward has really made a difference for consumers. The future we're being led into by our customers and by the advance of technology is exciting.

**PUF:** Maybe you can explain that a little bit more. What's this digital platform like? Do CenterPoint and other Texas utilities support it?

**Kenny Mercado, SVP, CenterPoint:** We began our journey around 2005, when the Texas legislative decision was made that we were going to go forward with an investment in smart metering technology.

Around 2008, we were one of about a half-dozen utilities in America that went forward with our solutions.

We recognized in Texas that this was an opportunity for the competitive market to offer new products and services. It wasn't just an opportunity for the utility. We would be the leader in terms of deciding what type of technology, what type of asset to invest in, but the market was going to drive the consumer choice.

We deployed our system between 2008 through 2012 with the leadership of the Texas Public Utility Commission. Oncor, AEP and CenterPoint were very successful with our deployment across Texas with more than seven million metered accounts.

Then we had a Department of Energy grant back in 2010 that allowed CenterPoint to accelerate our investment. We finished a few years earlier and enabled the retail providers the opportunity to create products and services and get closer to customers a lot sooner.

**Pat Wood, former Chairman of the Texas PUC and FERC:** I want the same whiz-bang stuff that I get from the phone company. The whiz-bang stuff that I get at work. The whiz-bang stuff that my kids do at school. And now, I can finally do it with the most important commodity in this society, which is power.

**Jim Steffes, EVP, Direct Energy:** One example of how we use the Texas smart grid to enable a product for customers who want to use less energy is our daily bill or pre-paid service.

Basically, our customers determine how much they will pay into their account to start their prepaid service, similar to loading, or pre-paying, a roadway toll-tag account.

As customers use energy, we deduct the cost from their prepaid account as they go, and we communicate with them via a simple daily text to their cell phones, to let them know their daily usage and balance remaining.

With this product, the customer is in total control of both their energy usage and determining when they need to add more money to their account to continue their service.

Managing their bill every day as opposed to waiting forty-five days from the date of usage, allows customers to pay daily instead of monthly, and avoid having to put down a deposit.

Receiving information customers want to know, like for

example that today I used a lot of energy, gives me the information to make new decisions about how I use my energy the next day that will impact my daily bill total. Customers with the product are using ten percent less than similarly situated customers.

Another example is our Reduce Your Use Rewards program. This is a service where we pay customers to turn up their thermostats. This program is completely voluntary. We communicate with our customers to reduce their electricity use through the Reduce Your Use Rewards program.



When our customers follow our guidance, and use less energy during a peak event, they have an opportunity to save five percent on their monthly electricity bill. And many customers do turn up their thermostat and save money. In 2017, we rewarded customers ten percent of their energy charges on the bill, an increase from five percent in 2016.

**Kenny Mercado, SVP, CenterPoint:** We didn't just make investments in technology. We made investments in applications that directly connect to the consumer, and provide real-time, situational benefits.

Anybody that wants to work the competition must be efficient. If they're not efficient, then there are a lot of congestion problems and challenges that get in the way.

The efficiency of our model has been priority one for fifteen years, and still is today. We're still trying to make it better.

**Jim Steffes, EVP, Direct Energy:** Our regulators found that balance between allowing the T&D utilities to make and recover on the investment in a smart grid and metering and letting the retailers create consumer products competitively.

That was big. It's a very different structure compared to what we see across the country today. In Texas, consumers are experiencing all of the benefits of a competitive market.

**PUF:** There are a lot of competitors. You have a lot of companies out there. Why is that?

**Ken Medlock, Rice University:** I think it's an interesting



conversation, highlighting something about competition. Texas is a case study for this, in many ways.

If you have several different entities that are competing for service, then you force those companies, or those entities, to differentiate themselves to capture market share.

Those methods of differentiation can be things that Direct Energy does. It could be I want renewable energy, so I pay a little bit more. In absence of competition we don't have that process. It just doesn't occur. One of the things that the Texas market has allowed us to see firsthand is the power of revealed preference. Consumers can shop, and find the service that best matches their needs.

**PUF:** In other states, you hear that it's just electricity. An electron is an electron, it's the same thing. Maybe a few consumers will get interested in getting a deal, but most consumers, they don't have time.

**Ken Medlock, Rice University:** It's not just delivering electrons, it's differentiation in terms of delivered energy services. How could we lower your bill by offering a variety of different services? How can we appeal to you as an individual?

The whiz-bang is the word that Pat used, meaning new technology, new techniques, new products that we can offer. All sorts of things that didn't exist pre-competition.

Companies are now in a position where they must compete for market share. You look at one thing that's often discussed, the growth of renewable energy in Texas.

Some of the growth hinges on the direct government support, but some of it also hinges on the fact that companies can differentiate themselves by marketing renewable energy, specifically, as a product to consumers.

**PUF:** One of the things that came up in other states is that

retail competition, it's a low margin, difficult business. But Direct Energy is glad to be working in the Texas market. Tell me why is this a good business, and what in the system makes it a good business?

**Jim Steffes, EVP, Direct Energy:** It goes back to the fact that you have six million opportunities to win customers every single day. I know I have competitors, and I know that consumers want a choice. The Texas market is attractive, and I know my efforts are rewarded by consumers if I find and create value for them.

We've changed the entire conversation with consumers, so it is not just about electricity. It's about electricity service. What Direct Energy markets, is helping you use less of what we sell,

which sounds completely counterintuitive to most businesses.

But if the business is about loyalty, and the business is about service, and the business is about value, then that makes all the sense.

We tailor the customer experience to what the customer wants. If they want to, they can get a bill every single day. Why twelve bills a year? What we want is to allow a customer the choice for how and when their bill is delivered, so they can control their usage and bottom line.

Texas is a highly competitive market, underpinned by a vibrant wholesale market, robust transmission system with relatively flexible interconnection ability, and a myriad of retail competitors working every day to innovate and differentiate their products to win and keep consumers.

What I really love about this market is that consumers are making choices every day. The real arbiter of our success is the consumer. That's the way it should be.

**PUF:** In other states when they ran into bumps, restructuring was thrown out. But somehow here, restructuring got worked out and made right.

**Pat Wood, former Chairman of the Texas PUC and FERC:** Well let's give credit. Bush, Perry, Abbott, we've had really twenty-three years of one type of governorship. There has not been any dramatic change from the top in the appointments at the commission or the overall tenure in the capital.

There has been a large consensus that the 1999 deal was the right deal for Texas.

What was nice was we did have twenty gigawatts of new power plants come in right off the bat in response to the great big welcome mat that we threw out in 1999. Then another twenty gigawatts of wind energy came. We went from zero wind to first

in the nation, just because the welcome mat was big. We didn't spend a lot of money on subsidies.

I do think in some of the other states, when the winds buffeted, they wanted to go back in their hole or muffle the market, but to their credit, the leaders of Texas did not do that.

The buffeting times were after Hurricanes Katrina and Rita ran prices up in '05. Then we had another shorter-term price spike in June '08. But then came fracking and horizontal drilling and lots of natural gas from coast to coast. It's been a gravy train ever since for the customer.

In the Texas market design, particularly by quarantining the wires company, we gave retailers like Direct Energy, NRG, and TXU Energy the golden keys. They have the link to the customer. It is their envelope that shows up twelve times a year with good or bad news.

You, the customer, have a new business relationship with a new provider. That new provider is a competitive provider. If you aren't happy, find another one.

If they go under, there is a backstop company to float you, but it's between you and them, and we're not going to get in the way by over-regulating.

**Jim Steffes, EVP, Direct Energy:** The way we work in Texas is we've agreed with CenterPoint, Oncor, and the other T&D utilities, through the regulatory process, that they're going to provide a regulated service, a delivery service for us.

Direct Energy pays CenterPoint on a scheduled tariff that the PUCT has allowed. My company is on the hook for paying what my customer used of their network and then I come back to my customer and say please pay me.

We have the bad-debt risk. We have the customer contact.

We send the bill. We are driven by competition to make those interactions as effectively and as friendly as they are in other markets.

**Kenny Mercado, SVP, CenterPoint:** There's a lot of conversation around technology today. In Texas, you make technology investments, but they're prudent investments. We don't have sandboxes where we play with different types of investments and make poor, inefficient choices.

When we make investments around technology to enable the market to be more efficient, those that are tried and true are going to be successful in the long term. If they're not, your shareholder loses, on the retail side.

Or the wholesaler loses on the wholesale side. If you go out and spend ten million dollars on a battery technology, and it's



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– Jim Steffes

not being utilized, you're out. The ratepayer in Texas doesn't feel the pain of those poor investments.

That's that balance again. We're talking about wholesale, wires and retail. We're working hard to make technology investments that provide the full stream of benefits from supply all the way down to the customer.

That's a real important part of what we've done over the last ten years and what we're going to do even in the next ten years. Why is Texas the leader in renewable power today? Good investments, customer choice, economic decision making, all factor into the final product.

We now have more renewable capacity in Texas than we have in coal today. That's not going to change. The rest of the United States is going to follow that, by the way. We're an indicator of what's going to happen everywhere in the country, within reason. What we're doing well in Texas is going to continue to grow and prosper in the next five to ten years.

**Jim Steffes, EVP, Direct Energy:** This industry made choices in the late '90s and early 2000s on who does what. It was clearly defined which piece is important for T&D utilities like CenterPoint to do and which piece is for competitive suppliers like my company, Direct Energy, to do. Once we agreed upon roles, we determined how to work together and keep it integrated.

We also had a fundamental belief that consumers, households,

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can in fact, buy electricity in a marketplace. We decided that selling electricity is not a natural monopoly. Sending a bill is not a natural monopoly.

It's not a leap of faith anymore because we're fifteen years into a successful market in Texas. I'm certain that consumers in New York, Ohio, and Florida are as capable as consumers in Texas of making choices on who provides their energy and energy services.

**Ken Medlock, Rice University:** This conversation kind of goes back to the very first question. How successful is competition in the state of Texas?

If you look at the average rate paid over the entire time period from 2002 through 2016 by consumers in areas where competition is allowed versus those where you still have regulated monopolies, you see the average is higher. But, to stop there and attempt to argue competition has not worked is disingenuous. Trends matter.

The retail price relative to the wholesale price in Texas in competitive market areas has fallen significantly. That's been true since the outset of this grand experiment that's been run in Texas. It continues to fall.

What's more, when you compare that to rates in areas where you don't have competition, the exact opposite is true in some cases. To the point where prices are now lower in competitive areas than some non-competitive areas. That really speaks volumes about the impact of competition.

**PUF:** Are there challenges as you look forward?

**Ken Medlock, Rice University:** It seems conversations about the benefits of competitive markets continue to arise. Looking at Texas, if I go back to 2002, rates in areas where competition was introduced were initially higher than in areas where competition was not introduced.

Since 2002 retail rates in areas where competition has been allowed have fallen. Not only have they fallen relative to wholesale prices, but they've fallen relative to retail rates in non-competitive areas. And, they're lower in many competitive market areas now than they are in non-competitive areas.

It's really a classic indication of efficiencies that have been wrought as energy service providers compete to capture market.

The only way you stay in the game is by providing a service at the lowest possible cost. That ends up leading to what some people would call margin compression. But for the consumer,

it is beneficial, because it leads to a reduction in the price at the retail level relative to the wholesale level.

If you're trying to evaluate retail competition, that's really the metric you need to consider, and it should be the core of these types of discussions.

**PUF:** In other regions we had institutional problems at the wholesale level. We have integrated markets in other parts of the country. Are the wholesale markets operating well here?

**Pat Wood, former Chairman of the Texas PUC and FERC:** You mean MISO? There are still some rate-based power plants here. San Antonio and Austin and some of the co-ops remain vertically integrated. It's not a big part of the mix, so they don't distort too much.

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— *Ken Medlock*

We have twenty gigawatts of wind energy getting a twenty-two-dollar subsidy for every megawatt hour, so that distorts. There are things that look like MISO, but there is a substantial difference in the level of competition.

**PUF:** Yes, there's enough competition, absolutely. You have to have your wholesale power. Now, perhaps Direct Energy owns some power capacity.

**Jim Steffes, EVP, Direct Energy:** We supply energy to over four million households and we are one of the top providers to business customers across North America. In the summer months, our peak load across North America is over twenty thousand megawatts, which is a big portfolio with zero-owned generation.

We have no owned generation in North America, because the wholesale markets in New York, PJM, Texas and everywhere else, are liquid enough and deep enough that we can manage the market through both the short term and the long term.

Texas works extremely well because there's been a continuity of thought, legislative and regulatory certainty, and leadership committed to a fully competitive market. It all starts and ends with a market that is focused on meeting the individual consumer's needs and delivering what households and businesses want every single day. That's what makes the Texas market special. **PUF**

"However, demand charges have significant potential to accelerate the adoption of behind-the-meter storage, even at seemingly low demand charges and low overall electricity prices." Jim Pyke and Nic White-Petteruti, January PUF 2.0.