CenterPoint Energy

Always There.®

Education Customer Symposium

November 15, 2016

Mission



To foster enhanced communication and strengthen long-term relationships with high valued customers through a trusted energy partnership.

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Agenda

10:15 a.m. – 10:20 a.m.	Welcome and introduction: Gregory Knight, Senior Vice President and Chief Customer Officer, CenterPoint Energy
10:20 a.m. – 11:00 a.m.	Keynote address – Dr. Guy Sconzo, Executive Director, Fast Growth School Coalition, Houston, Texas
11:00 a.m. – 11:20 a.m.	Energy Efficiency Case Study – Chad Corbitt, Energy Manager, Klein ISD
11:20 a.m. - 11:50 a.m.	CEO Update - Scott Prochazka, President and CEO, CenterPoint Energy
11:50 a.m. – 12:20 p.m.	Lunch and conversation
12:20 p.m. – 12:40 p.m.	Electric Reliability – Steve Greenley, Vice President, Distribution Power Delivery
12:40 p.m. – 1:00 p.m.	Natural Gas Reliability – Tal Centers, Vice President, Safety and Gas System Integrity
1:00 p.m. – 1:20 p.m.	Natural Gas Market Update – Joe Vortherms, Vice President, Energy Services
1:20 p.m. – 1:50 p.m.	Question and answer panel – ALL
1:50 p.m. – 2:00 p.m.	Summary and closing remarks, Gregory Knight

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This presentation and the oral statements made in connection herewith may contain statements concerning our expectations, beliefs, plans, objectives, goals, strategies, future operations, events, financial position, earnings, growth, revenues costs, prospects, objectives, capital investments or performance and underlying assumptions and other statements that are not historical facts. These statements are “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995. You should not place undue reliance on forward-looking statements. Actual results may differ materially from those expressed or implied by these statements. You can generally identify our forward-looking statements by the words “anticipate,” “believe,” “continue,” “could,” “estimate,” “expect,” “forecast,” “goal,” “project,” “intend,” “may,” “objective,” “plan,” “potential,” “predict,” “projection,” “should,” “will,” or other similar words. The absence of these words, however, does not mean that the statements are not forward-looking.

Forward-looking statements in this presentation include statements about natural gas prices, natural gas storage inventories, and natural gas supply vis-à-vis demand, electric reliability, and natural gas reliability. We have based our forward-looking statements on our management's beliefs and assumptions based on information currently available to our management at the time the statements are made. We caution you that assumptions, beliefs, expectations, intentions, and projections about future events may and often do vary materially from actual results. Therefore, we cannot assure you that actual results will not differ materially from those expressed or implied by our forward-looking statements.

Some of the factors that could cause actual results to differ from those expressed or implied by our forward-looking statements include but are not limited to the timing and impact of future regulatory, legislative and IRS decisions, financial market conditions, future market conditions, economic and employment conditions, customer growth and other factors described in CenterPoint Energy, Inc.’s Form 10-K for the period ended December 31, 2015 under “Risk Factors” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations - Certain Factors Affecting Future Earnings” and in other filings with the SEC by CenterPoint Energy, which can be found at www.centerpointenergy.com on the Investor Relations page or on the SEC’s website at www.sec.gov.

CenterPoint Energy Overview Video

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Keynote Address

Dr. Guy Sconzo
Executive Director
Fast Growth School Coalition, Houston, Texas

FAST GROWTH SCHOOL COALITION

CHALLENGES, ISSUES, GOALS COLLABORATING AND CONSERVING FOR STUDENTS

November 2016

FASTGROWTH
SCHOOL COALITION

FAST GROWTH SCHOOL COALITION

- 20 year-old organization representing all fast growth, emerging fast growth and friends of fast growth districts at the Texas Capitol
- A fast growth district is one that is larger than 2,500 students and has grown in enrollment by at least 10% over the past 5 years.
- This year their 75 fast growth districts, approximately 12 emerging fast growth districts, and approximately 12 friends of fast growth districts (these are once eligible fast growth districts)

IMPACT OF SUPREME COURT RULING

- No mandate for school finance change
- Unbridled legislative discretion
- In the clear message of the Court

  "While Texans may desire a public education system that produces even better results or better results more quickly, their remedy lies in the Legislature and thus in the privilege and duty that all Texans have to elect the legislators who will implement the policy choices they desire."

REVENUE PERFORMANCE
FY 2016 – END OF YEAR

	Biennial Revenue Estimate Projected Change	Year – to – Date Change
Sales Tax	1.24%	-2.26%
Motor Vehicle Tax	5.85%	2.28%
Natural Gas Tax	- 31.95%	-54.80%
Oil Production Tax	- 35.92%	- 40.80%
Alcoholic Beverage Tax	4.21%	3.84%
Cigarette and Tobacco	- 2.81%	-1.98%
Motor Fuels Taxes	1.79%	0.94%
TOTAL Taxes	-1.61%	-5.14%

HIGHWAY FUNDING DIVERSION

- Diverts potentially $2.5 Billion per year of sales tax revenue to highway funding
  - Diverts any excess above $28 billion, up to $2.5 billion
  - Begins in 2018 fiscal year

THE BIG REVENUE PICTURE

- Legislature left town in 2015 with over $6 billion
- Legislature will return with approximately $2 billion remaining due to downturn in economy
- Pressures on health care funding and disaster funding will most likely diminish remaining balance even more
- Similar to last session, expect Legislature to sweep budget of TEA (most likely several hundred million dollars due to local value growth)
  - Legislature swept $700 million last session

DECLINING STATE SHARE OF FOUNDATION SCHOOL PROGRAM

Year	Local M&O Taxes	State Funding	% State
2015-16	$22.2 B	$16.8 B	43.1%
2016-17	$23.2 B	$15.8 B	40.4%
2017-18	$24.4 B	$14.4 B	37.1%
2018-19	$25.7 B	$13.7 B	34.8%

2015-16, 2016-17, and 2017-18 from current MC&A statewide model; 2018-19 projected without a model

TEA'S LEGISLATIVE APPROPRIATIONS REQUEST

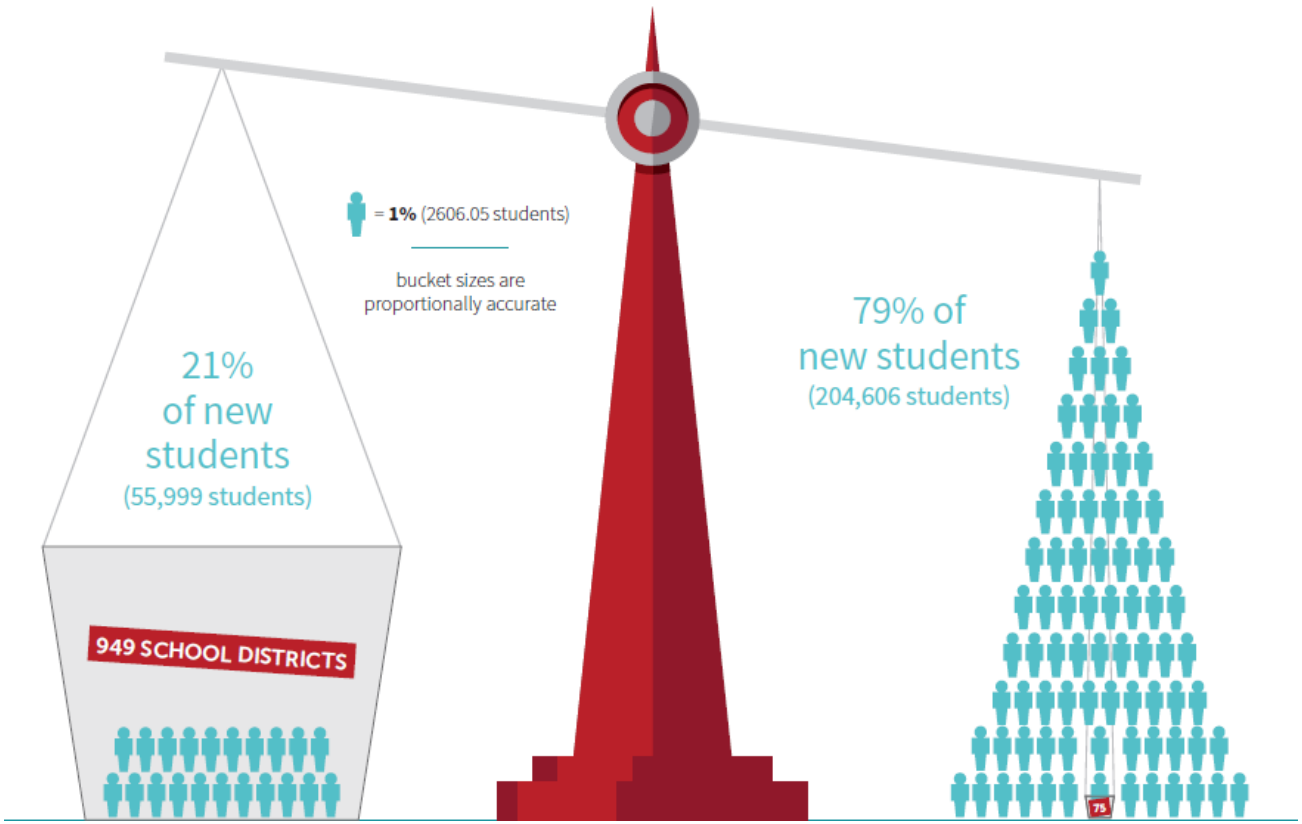
- FSP request is for $2.1 billion less funding
  - $3.1 billion less General Revenue
  - Value growth more than covers the additional cost of enrollment growth
  - 5.03% annual value growth assumed
  - Recapture rises to $5.1 billion
- Austin Yield speculation for 2017-18
  - Likely increasing 10-15% ($85-89)
  - TEA's Legislative Appropriations Request uses $84.30 for 2017-18 and $88.39 for 2018-19
  - 0.2% increase for most districts

Release Date: September 2016

260,605

Total Enrollment Growth in Texas Schools in the Past 5 Years

2010/11 through 2015/16, Does Not Include Charter Schools



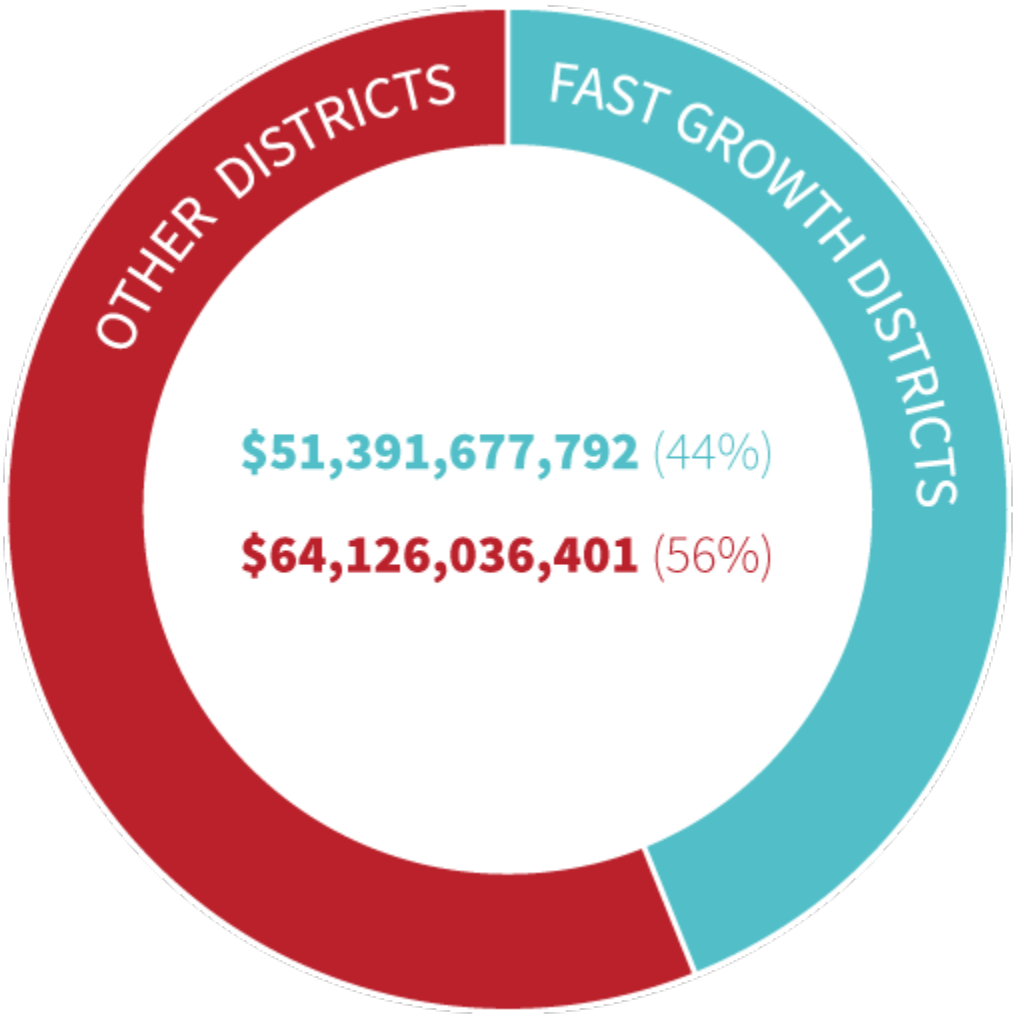

OTHER DISTRICTS
FAST GROWTH DISTRICTS
$51,391,677,792 (44%)
$64,126,036,401 (56%)

TABLE 3

Districts At or Near 50-Cent Cap for Interest and Sinking Tax Rate

I&S CATEGORY	FAST GROWTH DISTRICTS	OTHER DISTRICTS	STATE TOTALS
50¢ and Above	14 (19% *of fast growth disticts*)	18 (2% *of other disticts*)	32
40¢ to < 50¢	19 (25%)	63 (7%)	82
30¢ to < 40¢	22 (29%)	136 (14%)	158
20¢ to < 30¢	10 (13%)	203 (21%)	213
10¢ to < 20¢	8 (11%)	214 (23%)	222
Up to 10¢	1 (1.5%)	138 (15%)	139
No Debt	1 (1.5%)	177 (18%)	178

State Facilities Support Compared to Total Debt Service, Historical

SCHOOL YEAR	TOTAL STATE DEBT SERVICE	TOTAL STATE AID FOR DEBT (EDA and IFA Programs)	% STATE AID FOR ALL DEBT
1999-00*	$1,593,093,190	$618,443,527	38.8%
2000-01*	$1,574,213,053	$702,040,387	44.6%
2001-02*	$2,060,489,686	$790,795,482	38.4%
2002-03*	$2,136,434,480	$740,317,703	34.7%
2003-04	$2,729,275,694	$758,202,105	27.8%
2004-05	$2,927,019,964	$713,433,061	24.4%
2005-06	$3,164,066,682	$747,933,693	23.6%
2006-07	$3,562,689,711	$725,215,579	20.4%
2007-08	$4,031,164,831	$731,986,987	18.2%
2008-09	$4,492,685,673	$657,735,033	14.6%
2009-10	$4,767,307,090	$584,814,378	12.3%
2010-11	$5,018,884,594	$598,707,181	11.9%
2011-12	$5,138,800,068	$647,757,482	12.6%
2012-13	$5,244,448,685	$606,166,496	11.6%
2013-14	$5,469,559,084	$620,033,878	11.3%
2014-15	$5,778,696,034	$558,852,413	9.7%
2015-16	$6,107,086,318	$453,706,392	7.4%

LEGISLATIVE PRIORITIES

- While the state has offered three key school facility programs to offset some of the costs of new infrastructure (Existing Debt Allotment, Instructional Facilities Allotment, and New Instructional Facility Allotment), there has not been a significant update to these funding mechanisms in almost **twenty years**

COLLABORATING STRATEGIES TO BENEFIT CHILDREN

- HB 5 Industry Councils
- District of Innovation Exploring/Planning
- Chamber of Commerce Involvement (Greater Houston Partnership Early Matters Model)
- Partnerships

CONSERVE FOR CHILDREN, SAVINGS, FUTURE

- Energy is second largest line item in the budget
- Involve children in learning the importance of conservation and leading energy savings projects
- Take advantage of every program CenterPoint offers
  - Load shed
  - Rebates
  - Energy audits/assessments
  - Instruction/Curriculum

FAST GROWTH SCHOOL COALITION

FASTGROWTH
SCHOOL COALITION

Guy Sconzo, Executive Director, FGSC
(281) 352-8525
guy@fastgrowthtexas.org

THANK YOU

FASTGROWTH
SCHOOL COALITION

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Energy Efficiency Case Study

Chad Corbitt
Energy Manager
Klein ISD

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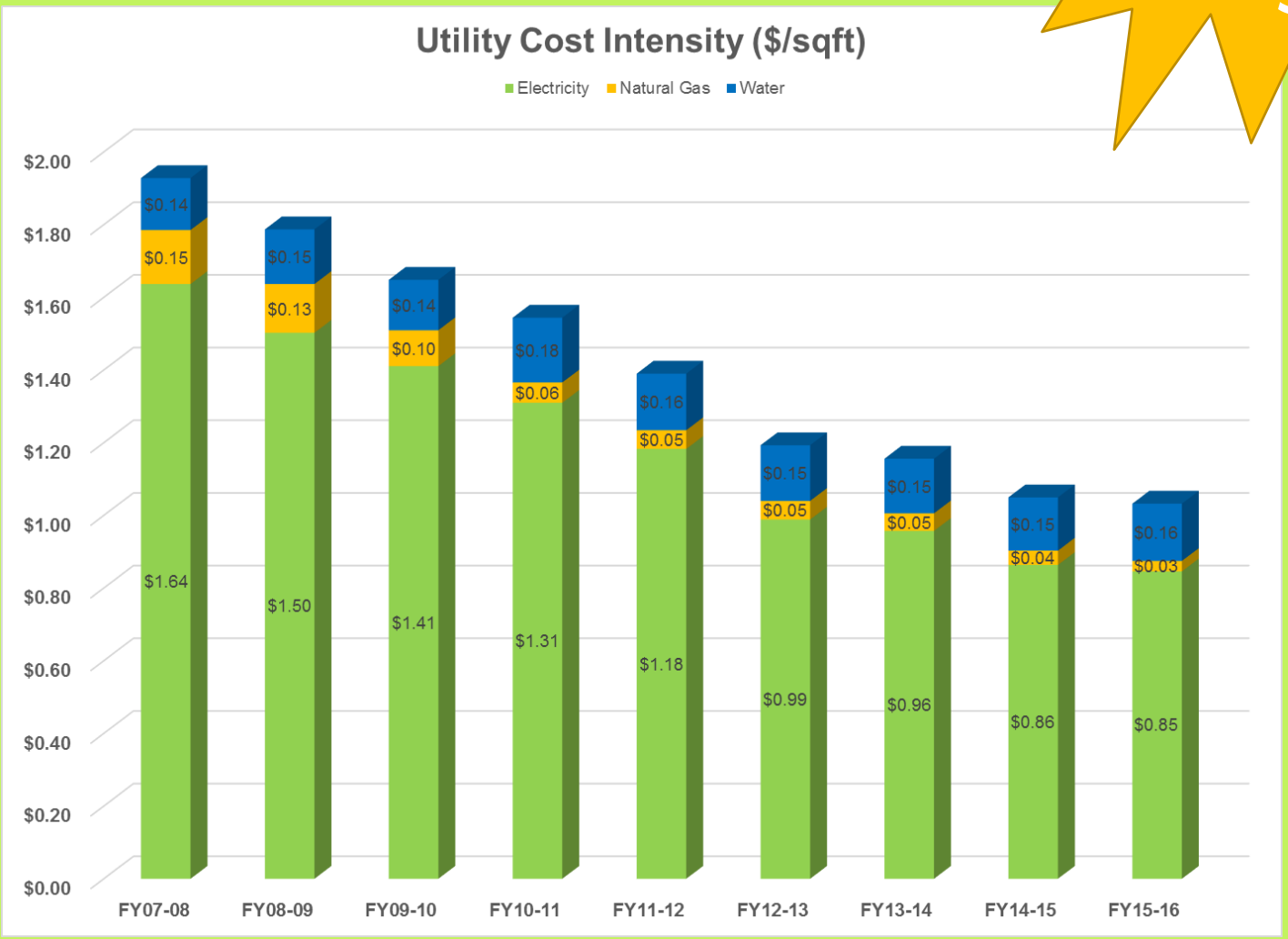
A Case Study in Energy Efficiency

November 15, 2016

A NEW HOPE

NINE YEARS LATER..

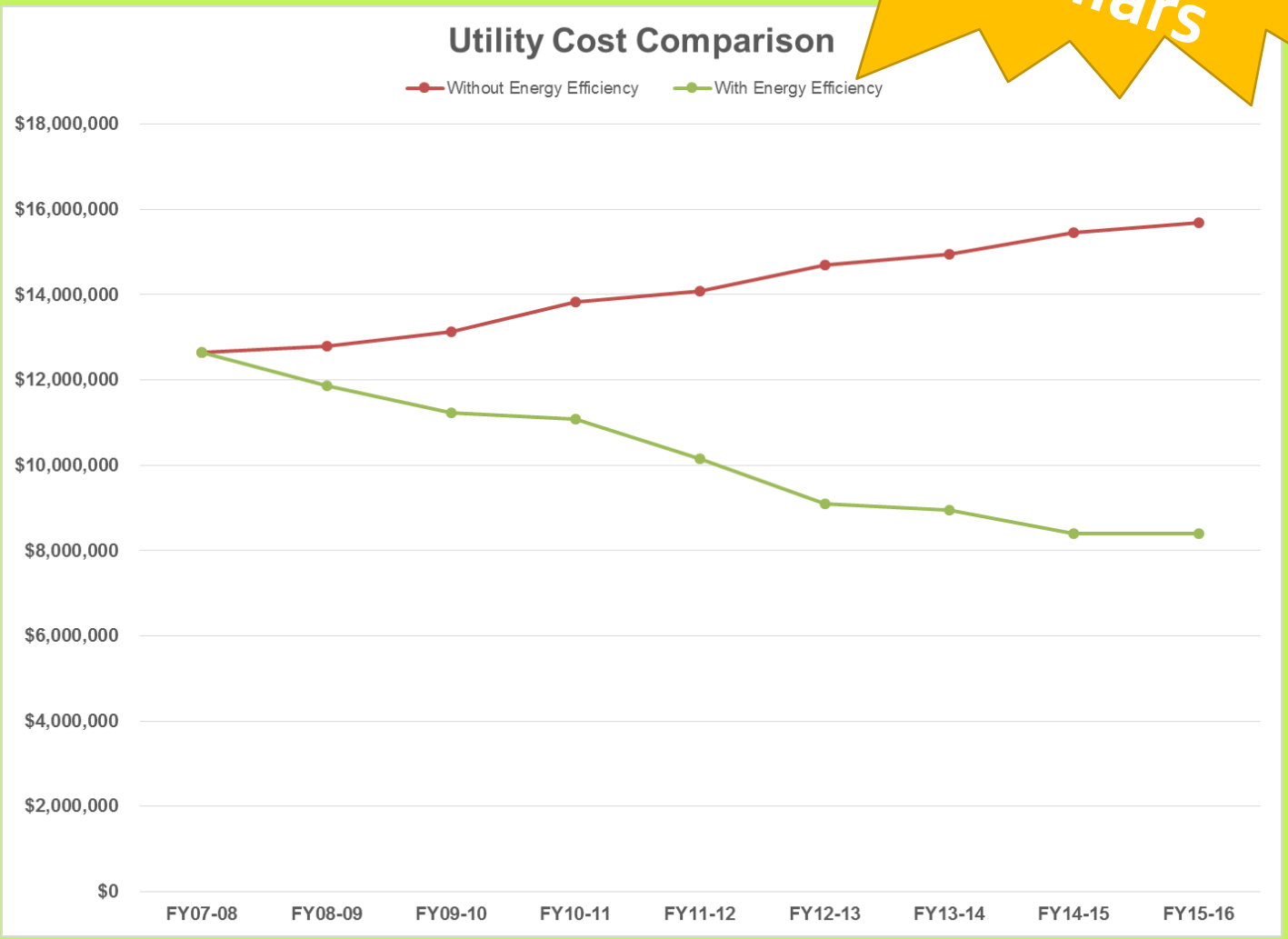
46% Savings



Utility costs have been reduced from $1.93/sqft to $1.04/sqft; an incredible 46% reduction

GENERATING …

$35 Million Dollars



More than $35,000,000 in Avoided Utility Expenses, which equates to about 700 Jedi Trainers (Teachers)

HOW DID THIS TAKE PLACE?

- Dedication from the Jedi Council to provide the needed Jedi Masters to manage this important task
- Involvement of Jedi Leaders throughout the Galaxy in the development and follow through of a Master Battle Plan
- Assistance from ally Civilizations in providing valuable support
- Ongoing Jedi Master persistence

HOW DID THIS TAKE PLACE?
(WITH TRANSLATION)

- Dedication from Administration to provide the needed Energy Personnel to manage this important task
- Involvement of Directors throughout the District in the development and follow through of a Master Energy Plan
- Assistance from ally Partners in providing valuable support
- Ongoing Energy Leader persistence

WHAT TO DO AT YOUR JEDI ACADEMY?

- Assess and grow the following areas:
  - **Ongoing Administrative support for the Energy Department - this is the first and most critical step**
  - A Director level Energy Team that is providing District feedback in the development and implementation of an Energy Master Plan
  - Partner relationships that are assisting with additional expertise and funding
  - An internal leader for Energy that is knowledgeable, dedicated and focused

QUESTIONS ?

Chad Corbitt, CEM, ATEM, JEDI MASTER

Energy Manager, Klein ISD

jcorbitt1@kleinisd.net; 832.249.4474

CEO Update

Scott Prochazka
President & CEO

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Topics

- National, state and local perspectives on trends in electricity and natural gas
- Our participation in and perspective on distributed energy resources
- Houston’s population and employment forecast
- CenterPoint Energy’s investments for growth, reliability, and safety
- Our value proposition

Electricity and natural gas trends

Ever-growing Consumer Expectations

Changing Regulatory Environment

Increasing Capital Investment

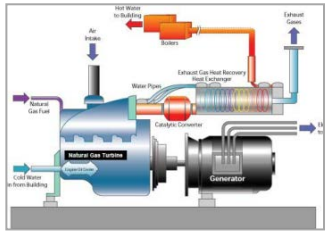
Emerging Energy Technologies

Distributed Solar

Utility-scale Solar

Wind

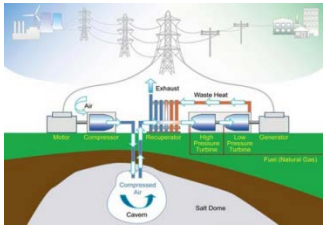
Fuel Cells



Combined Heat & Power

Energy Efficiency

Battery Storage



Compressed Air Storage

Microgrids

Electric & Gas Vehicles

Source: Lazard SNL Power and Gas M&A Symposium, Jan 2015

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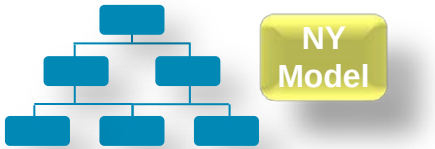
Market Environments for Emerging Energy Technologies

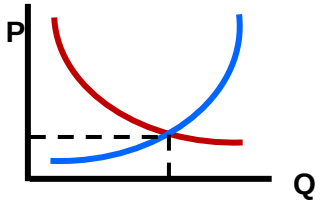


Central Planning
Regulators establish comprehensive regulatory framework and compact that defines utility roles, responsibilities, and financial incentives and penalties

Technology-Rich
Legal or regulatory requirements are established that put a "finger on the scale" for certain technologies

Incentive Subsidies
Special tariff or other subsidies (including tax credits) are established to encourage certain types of resources or utility behaviors

Infrastructure Incentives
Programs and mechanisms to promote development of certain kinds of energy infrastructure are established



Market-Based
Market and competitive forces are relied upon to allocate resources, select technologies, and compensate market participants

Source: ScottMadden Energy Industry Update, Winter 2015

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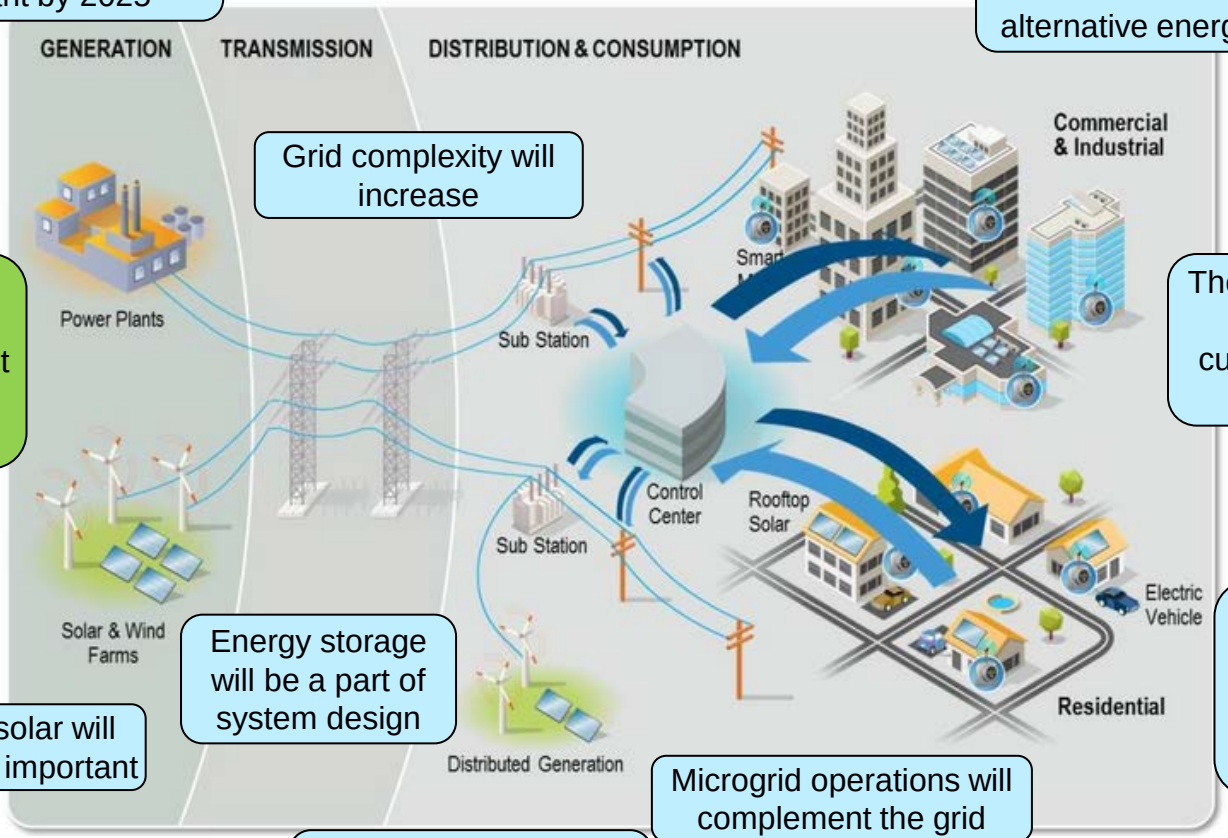
Our beliefs about the electric utility of the future

Emerging technology market share will be significant by 2025

The grid will be the platform for the future electric system

Energy Efficiency is the most cost-effective alternative energy source



Grid complexity will increase

Natural gas will continue to fuel the future – direct use and power generation

The electricity business model will include customized consumer services

Energy storage will be a part of system design

Some residential consumers will also become producers of energy; C&I markets for DER will have the greatest penetration in Texas

Utility scale solar will become more important

Microgrid operations will complement the grid

The electric system will include central and distributed generation

Picture Source: Trilliant

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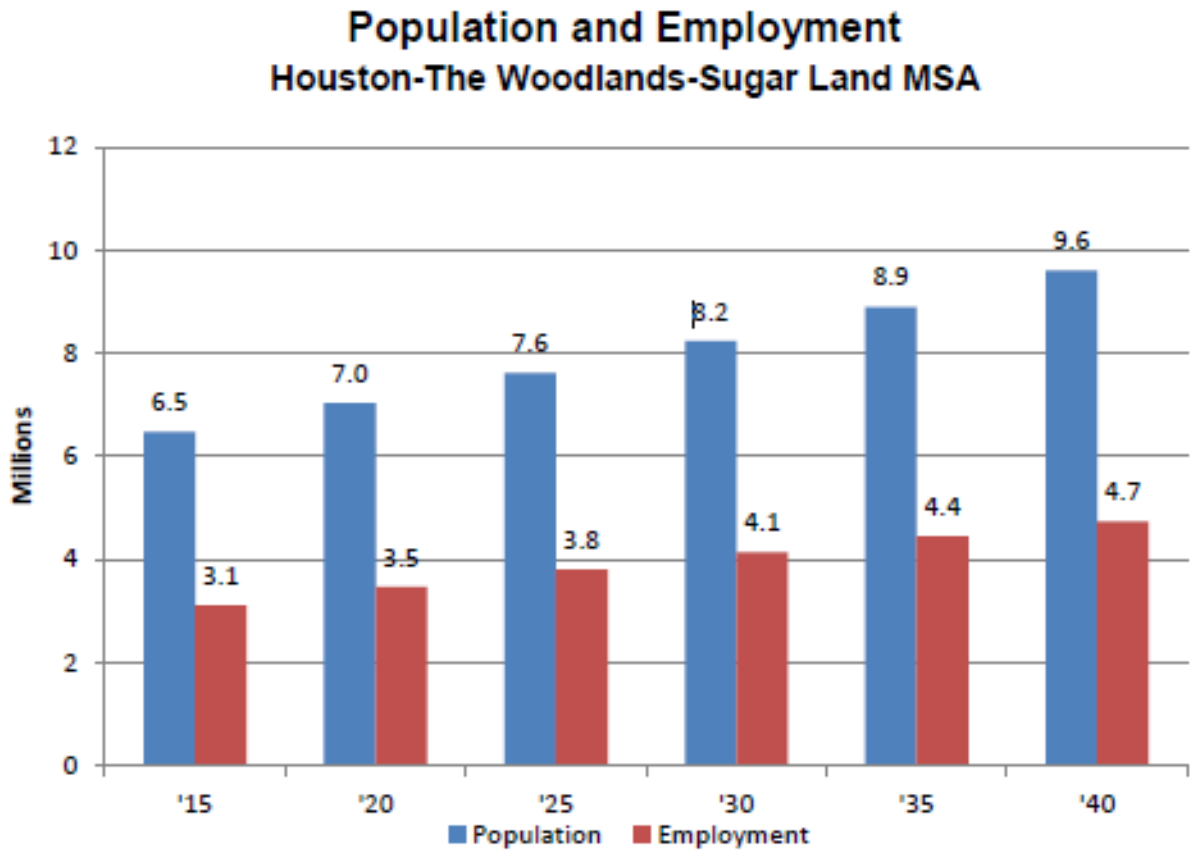
Population and employment forecast

The Perryman Group forecasts Houston's population and employment to grow faster than the state and the nation over the next 25 years.



Source: The Perryman Group, Summer 2016

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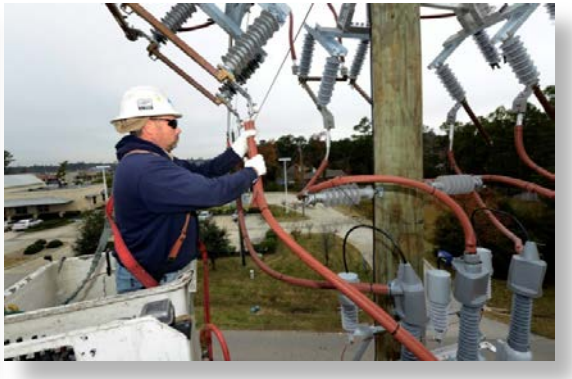
CNP is Building the Grid of the Future

Smart Meters

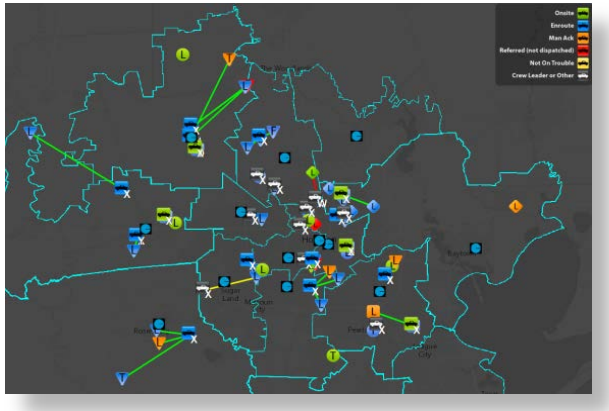
Intelligent Grid



Real-time usage data

Power Alert Service

Big Data Analytics



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CNP is Improving Customer Satisfaction While Reducing Carbon Emissions

Drive-by Advanced Meters

New, improved gas leak detection systems

Pipeline replacement programs

Predictive Analytics Engine

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Our value proposition

Where we started – traditional utility model

Yesterday

- **Businesses**
  - Transformation from integrated electric utility to wires and poles
  - Competitive natural gas supply
  - Regulated natural gas sales and delivery
- **Focus**
  - Safe and reliable infrastructure
  - Success measured by energy delivered; frequency and length of outages
- **Responsive customer engagement**
  - Success measured by % of calls answered in x time
  - Responsive to regulatory issues
- **Customer Expectations**
  - Measured against a traditional utility experience
  - Customer engagement predominately event-driven.

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Our value proposition

Where we are headed – drivers for evolution

Rising customer expectations across industries

Regulated and competitive services

Trusted energy partner

Today

- **Deliver energy**
  - Electricity and natural gas delivery
  - Competitive natural gas supply
  - Continued focus on safety and reliability
- **Deliver service**
  - Customized products
  - Self-service capabilities
  - Proactive communications (PAS)
  - Enhanced energy management and reliability solutions
  - Competitive solutions/partnerships
- **Deliver value**
  - Engagement with customer is proactive, enterprise-wide and seamless
  - Focus on financial and operational improvements for customer
  - Allows customers to focus on core competencies/skills

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Electric System Reliability Update

Customer service through reliability

Steve Greenley

Vice President – Distribution Power Delivery

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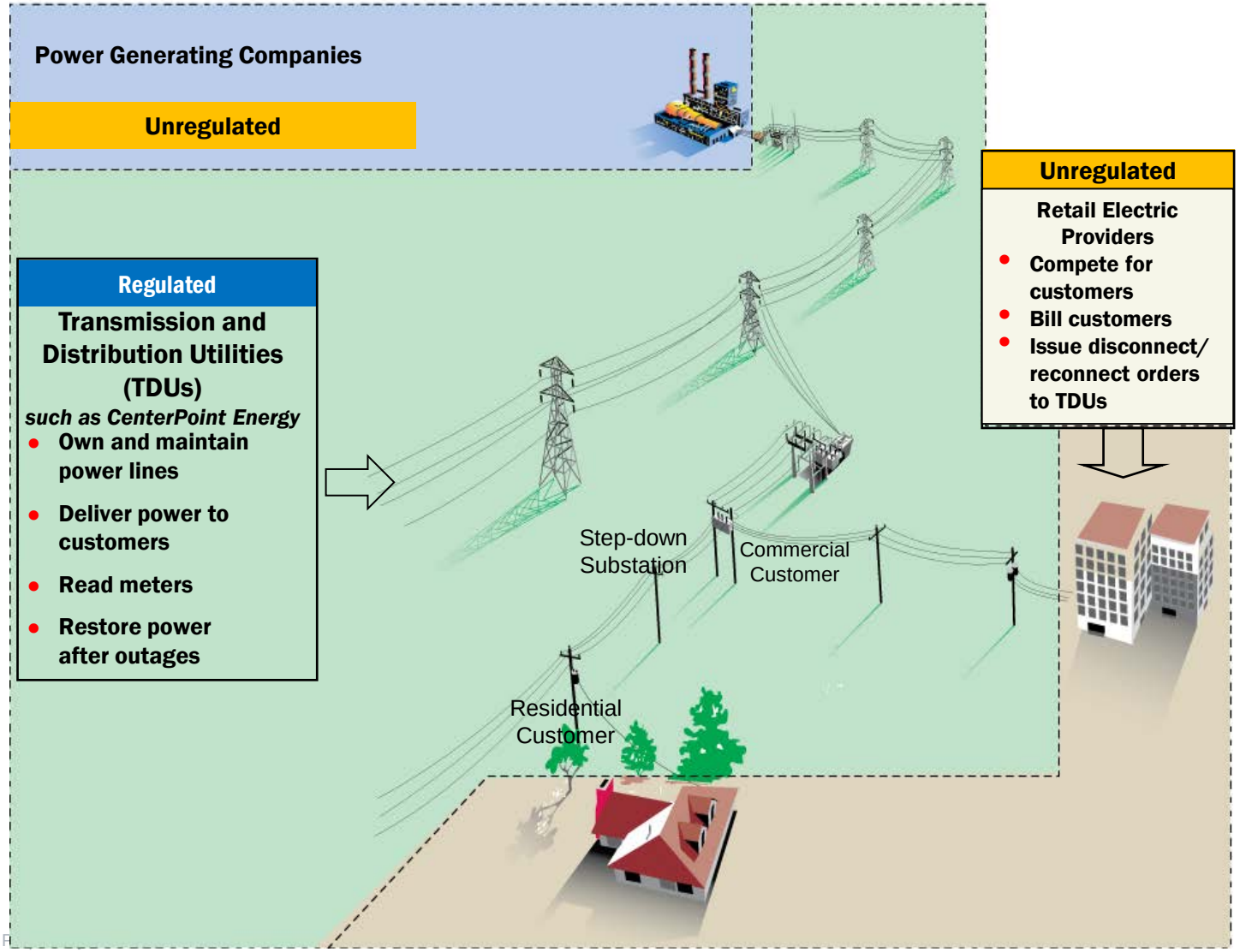
The Texas Electric System



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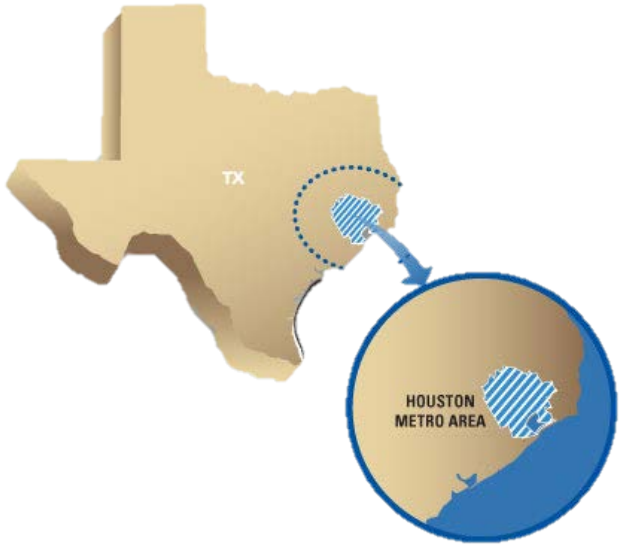
Electric Transmission & Distribution

- Customers consist of more than 69 retail electric providers that sell electricity to over 2.3 million metered customers in a 5,000 square-mile area that includes the vast majority of the Houston/Galveston metropolitan area

- Owns and maintains:
  - 51,594 miles of overhead and underground distribution lines
  - 3,749 miles of overhead and underground transmission lines

- Delivered 84.2 million megawatt-hours
- Experienced 2% customer growth, nearly 55,000 new meters
- Invested a record $934 million in capital projects
- Expect to invest $3.7 billion over next 5 years

Electric Transmission and Distribution



Source: Form 10-K

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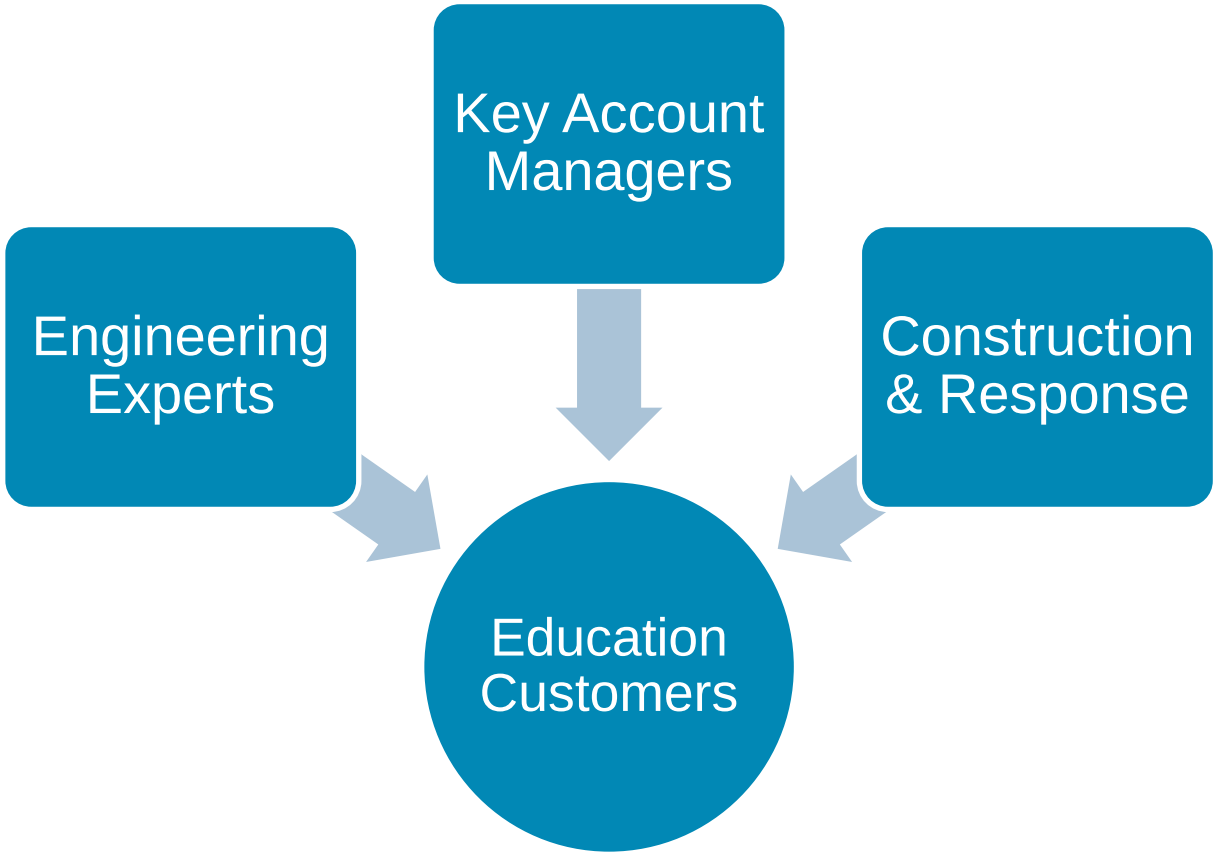
Dedicated Team

All education customers are treated equally with specialized resources.



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New Construction

- Robust new construction activity across the footprint
- Partner early in projects to identify ways to collaborate
- Working to improve communication and delivery of service

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We are modernizing and advancing the reliability of the grid

- Deploying intelligent grid with advanced management system
- Utilizing real-time situational awareness to restore services
- Crews are mobile managed and electronically dispatched
- Trees trimmed on proactive cycles
- Maintenance includes regular scheduled infra-red, wood pole replacements and inspection programs

IG Switching Device

Control Panel

Distribution Control Center

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Energy Efficiency Programs

- CenterPoint Energy provides various electric energy efficiency programs that help schools conserve energy and reduce electricity costs.

- Available Programs:
  - Commercial Standard Offer
  - Sustainable Schools
  - Commercial Load Management
  - Retro-Commissioning
  - Schools Conserving Resources (SCORE)
  - REP Coolsaver A/C Tune-up.

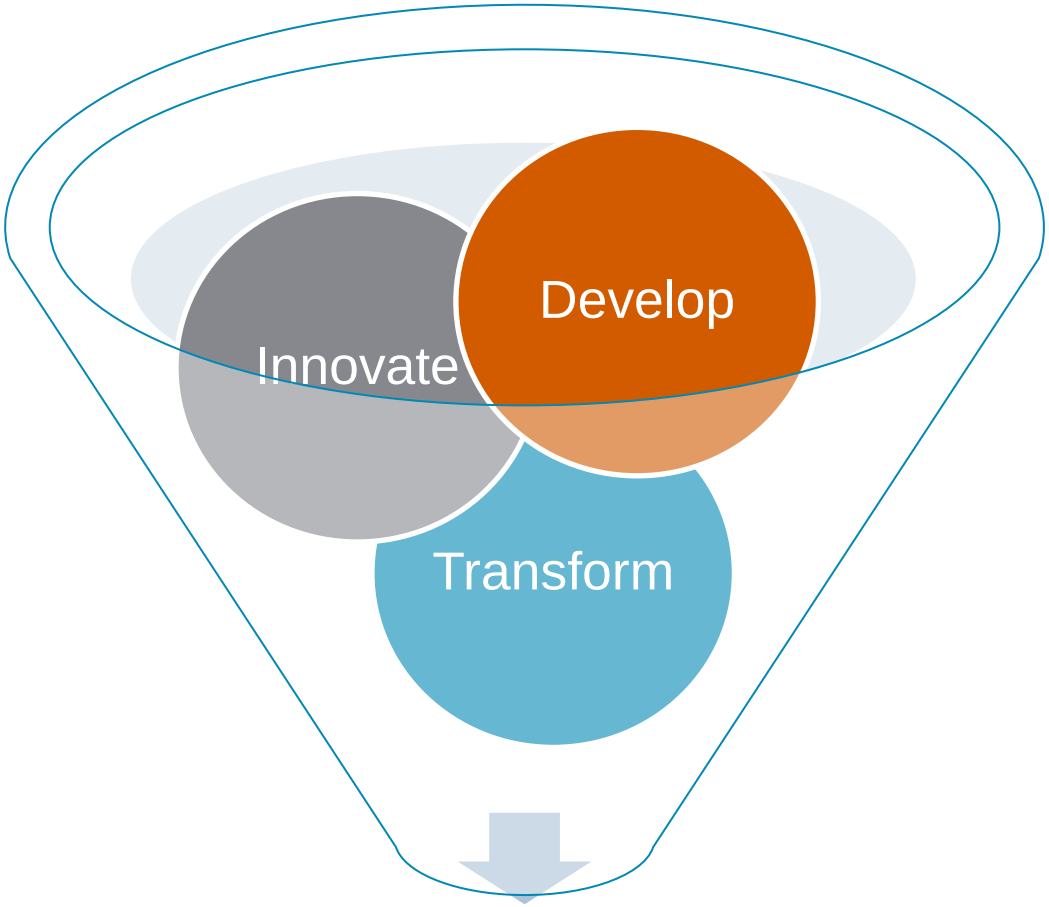
- For 2015, these programs provided schools incentives of $2.4 M on 310 programs resulting in projected savings of 37 MWs and 14.5M kWhs.

- For 2016 YTD, the incentives paid so far are $1.7M on 481 programs resulting in projected savings of 32 MWs and 13.8 M kWhs.

School Safety Outreach

- Over 1,000 students were reached through school safety assemblies in partnership with the Houston Astros focusing on electric and natural gas safety.
- Through our community partnerships, 67,000 students were reached with safety materials.
- 25,000 students received Louie the Lightning Bug and Buddy Blue Flame activity booklets at the City of Houston Back to School Festival on electric and natural gas safety.
- Our safety booklet distributions reached 42,000 students with titles such as "*Don't Get Zapped.*"

Let's do this together



Reliability Solutions

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Natural Gas System Reliability

Customer service through reliability

Tal R. Centers, Jr. - PE

VP Safety and System Integrity

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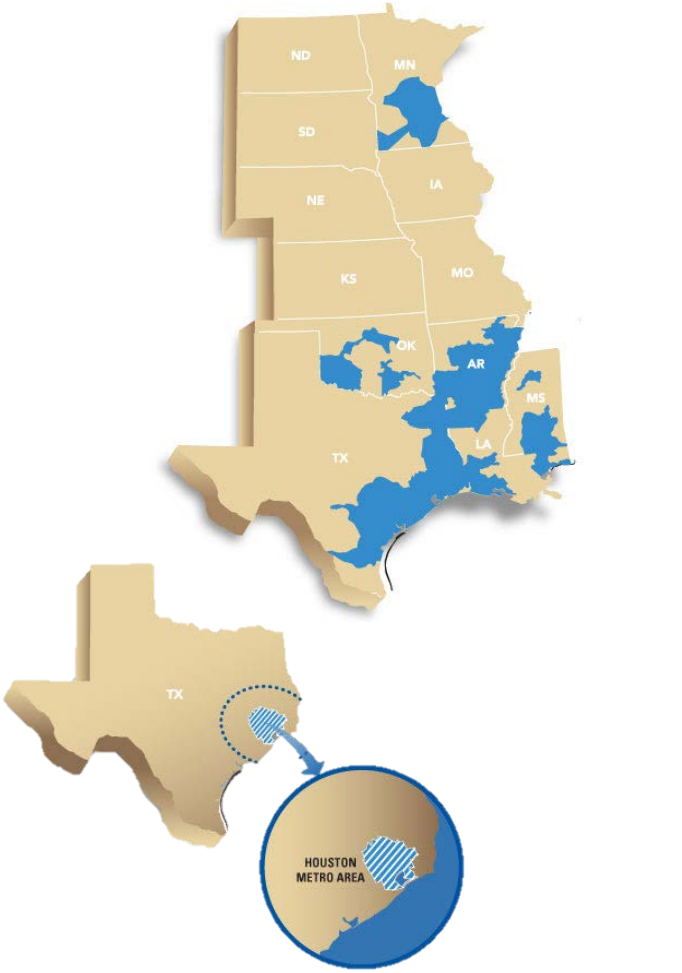
Natural Gas Distribution

Gas Operations

- Serves approximately 3.3 million customers in six states
- Owns and operates approx. 120,000 miles of main and service lines
- Growth of more than 40,000 customers in 2015
- Invested $600 million of capital in natural gas infrastructure in 2015
- Capital spending will remain high as we modernize our infrastructure for safety and reliability

Houston Metro Gas Operations

- Houston Market serves ~1.3 million customers
- Owns and operates over 34,000 miles of main and service lines
- Growth of nearly1,400 commercial customers in 2015
  - 1,220 small commercial
  - 175 large commercial & industrial
  - Invested $140 million of capital investments in natural gas infrastructure in 2015



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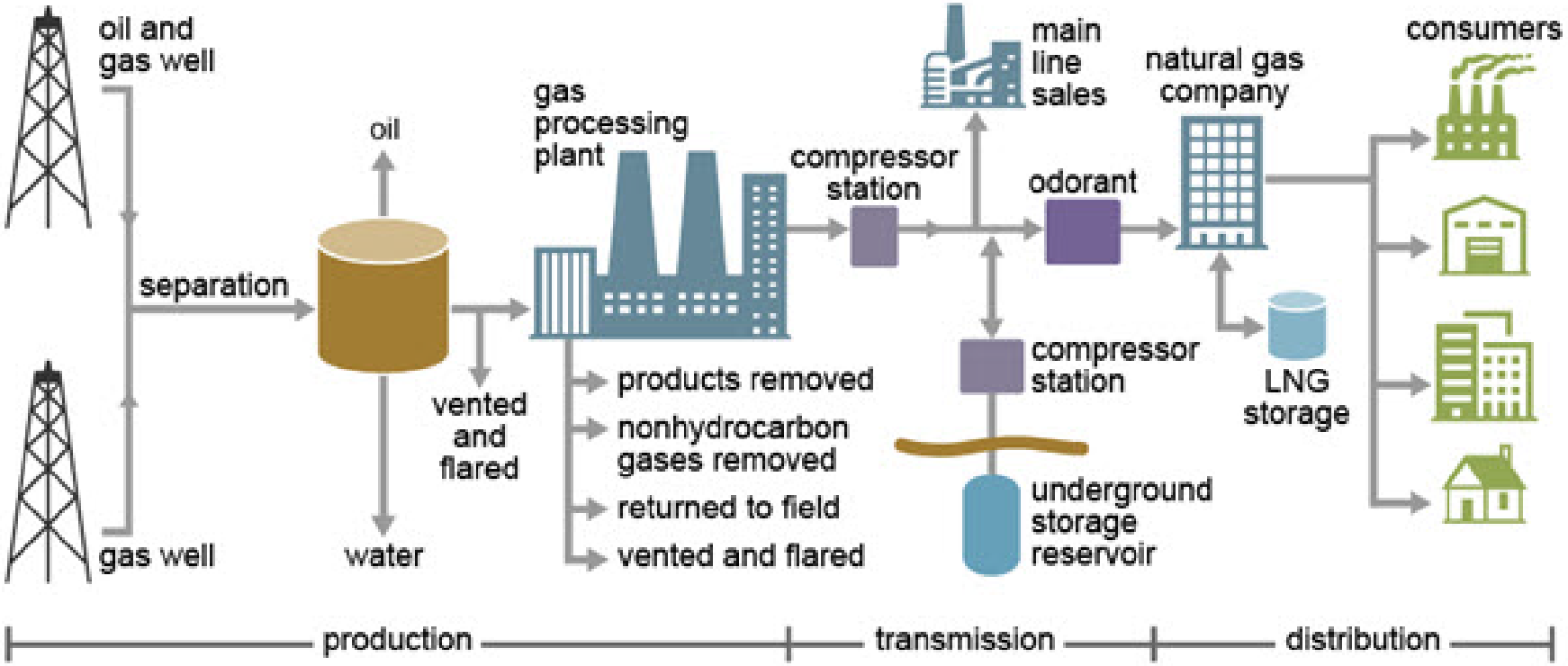
Natural Gas
Wellhead to Burnertip

Natural gas production and delivery



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System Reliability

Our approach to meeting your reliability needs

- **Safety** – gas is delivered safely and reliably
- **Customer Service** – customers are heard and best efforts are made to meet current and emerging needs
- **Service Delivery** – services are delivered when needed
- **Operational Efficiency** – services are delivered cost effectively

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System Reliability

What is considered?

- Gas Supply
- System Planning
- Asset Maintenance and Operations
- System Integrity & Risk Mitigation
- Customer needs (collaboration and feedback)

System Reliability
Gas Supply

CenterPoint Energy's goal is to provide a dependable gas supply under a variety of operating and market conditions. This is accomplished with relationships with most of the pipeline suppliers in the Houston Metro area.

- **Diversification** – Combination of gas supply contracts, storage and other instruments that yield a balance of reliability and reduce price volatility
- **Reliability** – Gas will be available when customers demand under a wide variety of operating and market conditions.
- **Gas Quality** – Gas meets specifications for end use
- **Reduced Price Volatility** – Mixture of supply at market price and storage withdrawal price stabilize the gas supply costs.
- **Reasonable Price** – The costs of supply will be reasonable based on market conditions.

System Reliability
System Planning

- Design for Safety and Reliability
  - Redundancy
  - Hardened system
  - Capacity for Peak Loads
  - Gas flow, pressure control, and odorization
- System reinforcement Modeling for Future Load and Volume Growth
- Integrated work force between Engineering, Marketing and Operations Departments

System Reliability
Maintenance and Operations

- Remote Pressure Monitoring and Control
- Line Locating – proactive monitoring of large construction areas and critical supplies
- Annual Inspections
  - Pressure control and delivery points
  - Control valves for emergency response
  - Above ground facility inspections
  - Cathodic Protection (corrosion mitigation)
- Digital Mapping System
- Operator Qualification monitoring for field personnel
- Supplier Relationships
  - Close coordination with suppliers for integrity shutdowns
  - Materials management and procurement (pipe, meters, fittings, etc…)
- Mobile Supply Alternatives
- Key Customer Meetings

System Reliability
System Integrity & Risk Mitigation

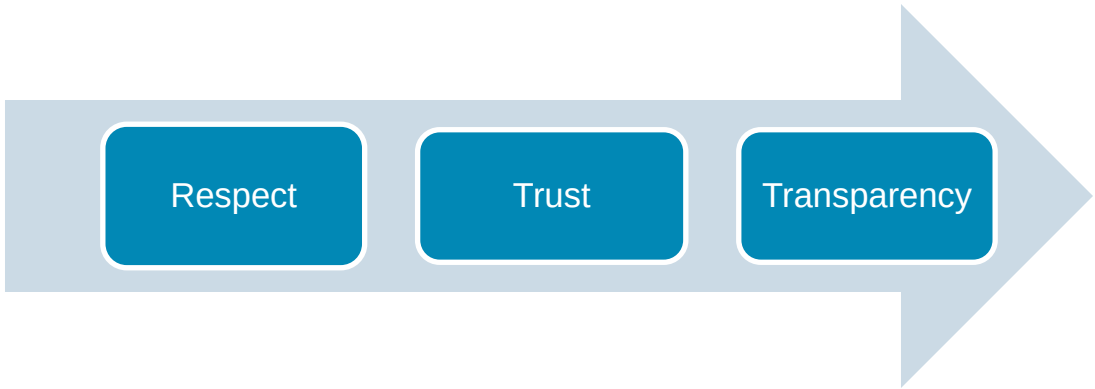
- System Rehabilitation and Modernization
  - Asset risk analysis and assessments
    - Transmission Integrity Management
    - Distribution Integrity Management
  - Corrosion Control
    - Below Ground Steel
    - Above ground atmospheric corrosion
  - Leak Survey Inspections
    - Performed at intervals between one and five years
- Public Safety Awareness
- Business Continuity
- Physical and Cyber Security

Your Role

Early involvement and communication

We must work collaboratively with our customers, to the greatest extent possible, to develop win-win solutions and align interests.

Communicate operational needs in a proactive manner to allow planning, permitting, and design



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Natural Gas Market Update

Joe Vortherms
Vice President Energy Services

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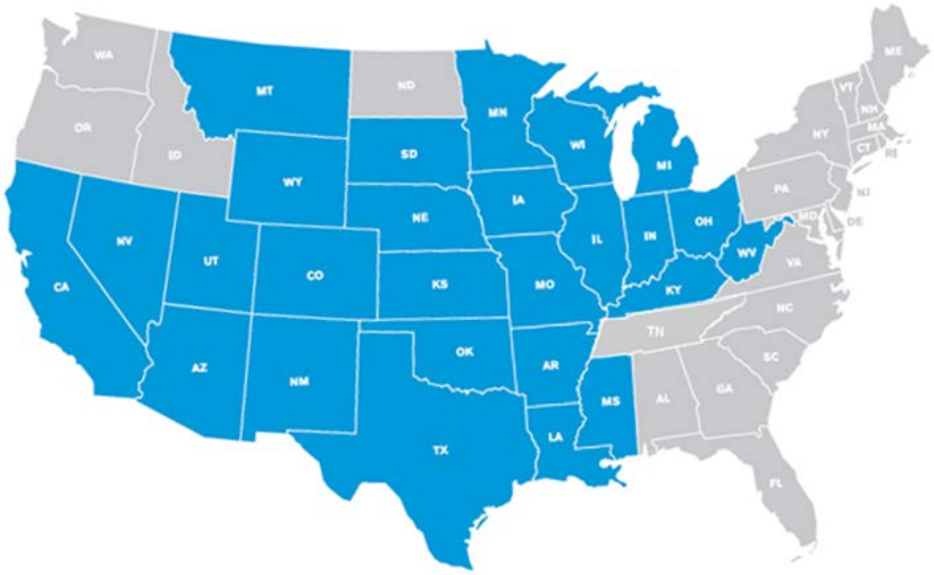
CES is a competitive company operating in the deregulated energy market

- CenterPoint Energy Services provides customers with competitive gas supply with a **customer retention rate over 90** percent.
- We work with a wide range of customers, from **utilities** and **power generators** to **manufacturers** and **retail** to small commercial and residential **Choice** programs.
- Our service offering extends **across 26 states** and serves customers **within 83 unique utility territories**.

CES Footprint



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Our Energy Services

Natural Gas Supply

Electric Supply Services

Pipeline Construction & Infrastructure

Mobile Energy Solutions

Green Services

Premier Partners

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Natural Gas Supply

Because the energy needs of our customers vary based on industry segment, geographical region, applicable utility tariffs and market conditions, CES works directly with each customer to develop a customized natural gas procurement plan.

Competitive Price Options

- **Variable Pricing**
  - Monthly market
  - Daily or monthly index
  - Index with a cap
- **Fixed Pricing**
  - Commodity
  - Basis
  - City Gate
  - Fixed price with downside participation
- **Structured Products**
  - Weather contingencies
  - Put/call options
  - Caps and collars

Supply Services

- **Daily & monthly balancing services**
  - Load forecasting
  - Nominations
  - Swing
- **Asset management**
  - Storage management
  - Firm and interruptible transportation administration
  - Capacity release management
- **Agency services**

Customer Segments Served

- Natural gas producers
- Bio-fuel/agricultural
- Health care
- Real estate
- Utilities
- Power generators
- Education/institutional
- Government/municipalities
- Co-op
- Manufacturing
- Retail
- Residential/Choice

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Drivers of Natural Gas Pricing

Natural Gas Price Component	Description	Drivers
 Commodity	The physical supply of natural gas; the largest component of delivered supply.	• Supply & demand • Economic activity • Market volatility • Weather • Geopolitical events
 Transportation	Interstate pipeline companies own, operate and maintain the pipelines that transport gas across state lines. This is the cost associated with moving gas from production fields to supply hubs to a utility distribution system.	• Geographic location • Pipeline tariffs • Available capacity • Federal Regulation
 Utility	Utilities own, operate and maintain the infrastructure that make up the utility distribution system . This is the cost associated with moving gas from the utility's supply purchase point to customer meter.	• Rate base • Utility rates • Rate class • Weather • Regulatory environment
 Marketer	Marketers arrange for the procurement of natural gas on behalf of customers, handle the transportation and storage of gas, and often assume financing and price risk.	• Trading activity • Billing systems • Credit • Transaction costs • Pipeline capacity

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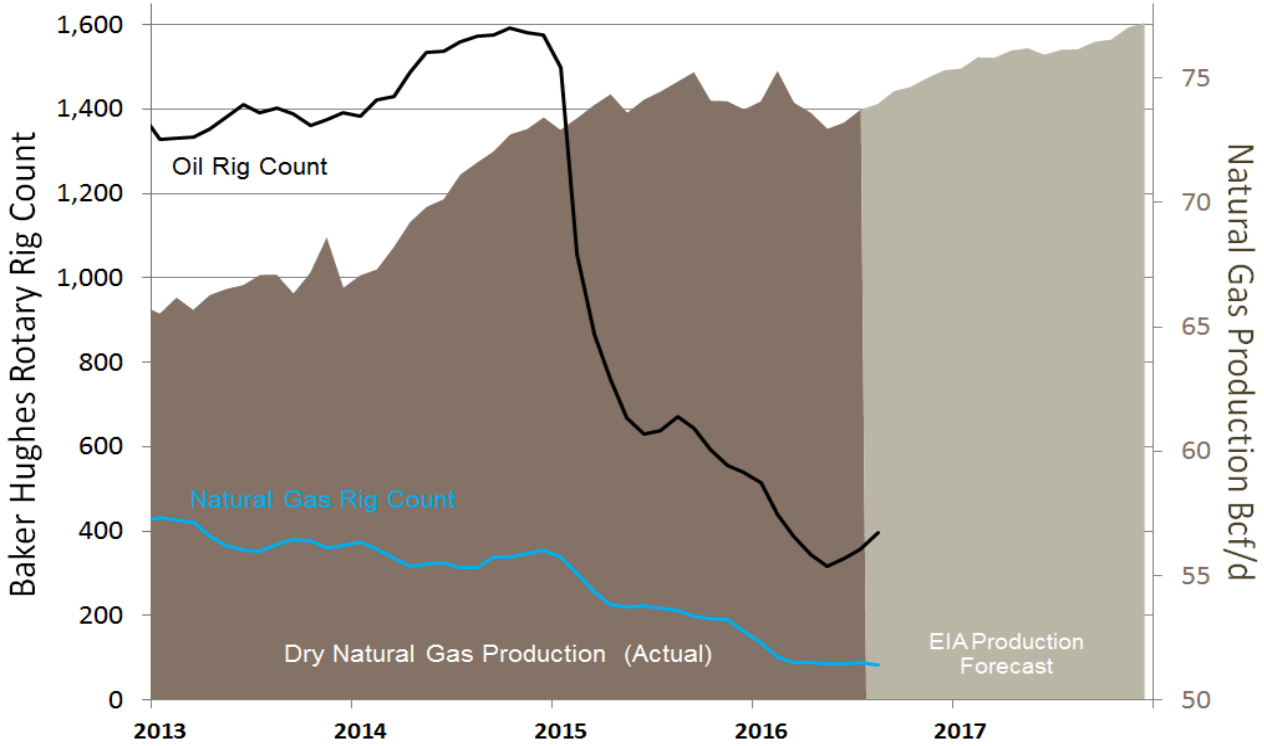
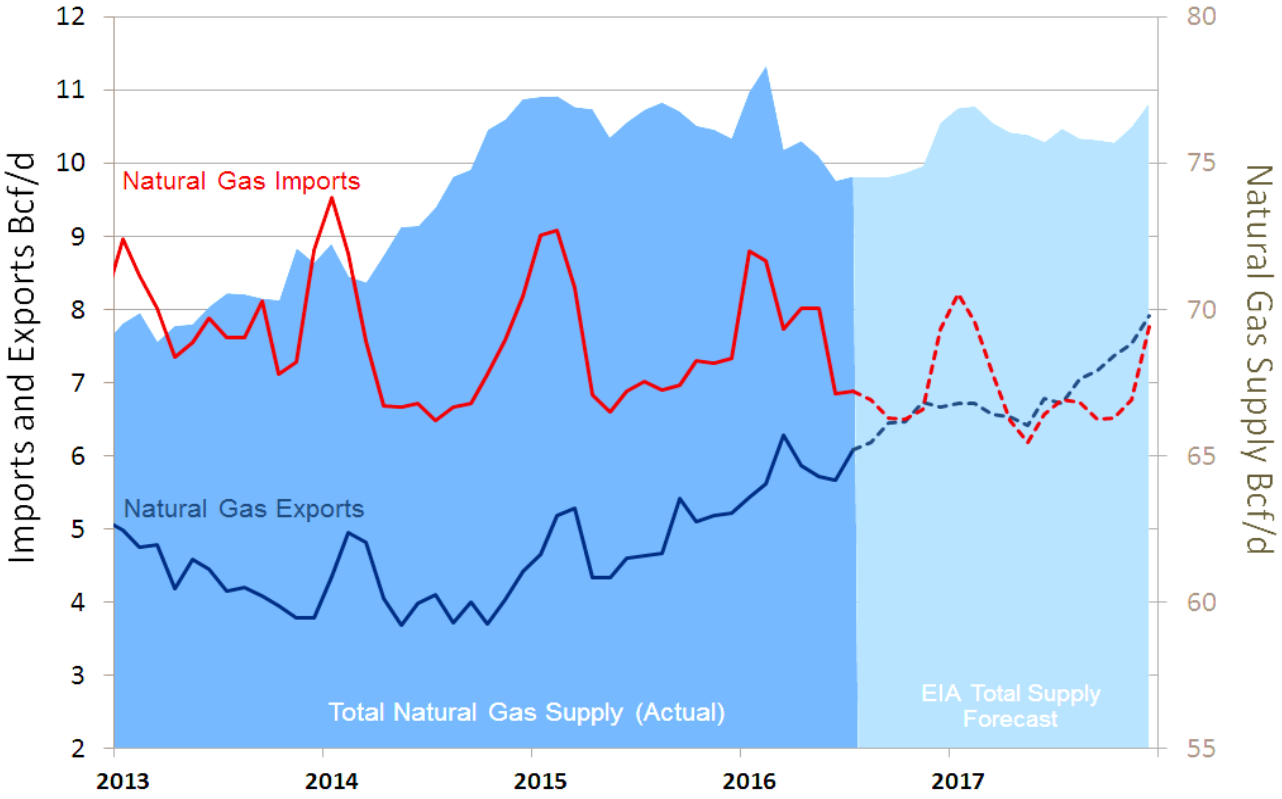
Production and Rig Counts



- The EIA's STEO report has revised production lower for the second quarter of 2016, but continues to forecast growth in the third quarter of 2016
- The Baker Hughes gas rig count has hovered between 80 and 90 active rigs since the beginning of April, while the oil rig count has now recovered 90 rigs (28%) since bottoming at 316 rigs at the end of May

Sources: EIA: Short Term Energy Outlook, Baker Hughes

Exports, Imports, and Total Supply



- Increasing LNG exports and pipeline exports to Mexico will keep total supply somewhat flat through the end of 2017 despite expectations of rising production levels

Sources: EIA: Short Term Energy Outlook, Baker Hughes

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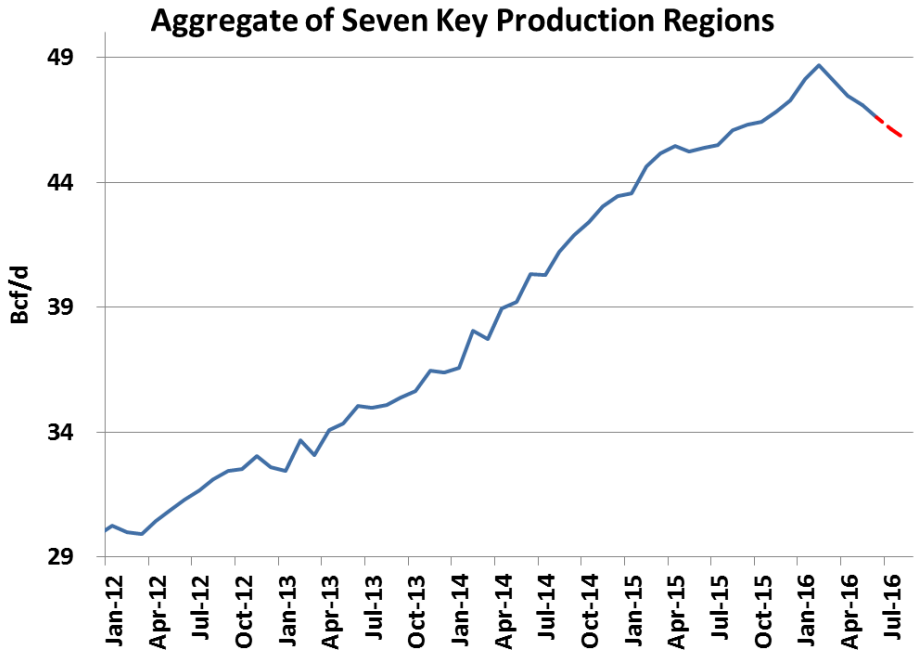
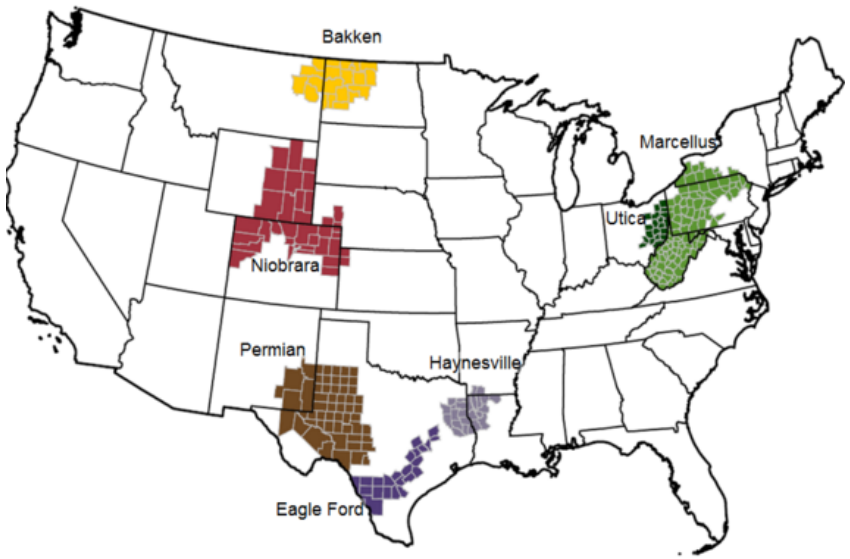
Major Production Regions

- Since production peaked in February, these key regions are estimated to be down 2.31 Bcf/d (4.8%) through July, and are forecasted to be down a total of 3.13 Bcf/d (6.4%) by the end of September
- These figures, which should be fairly representative of total U.S. gas production, continue to contrast significantly to the total production estimates in the EIA's STEO report, but closely align to the estimates and forecasts of other gas industry private analytic companies





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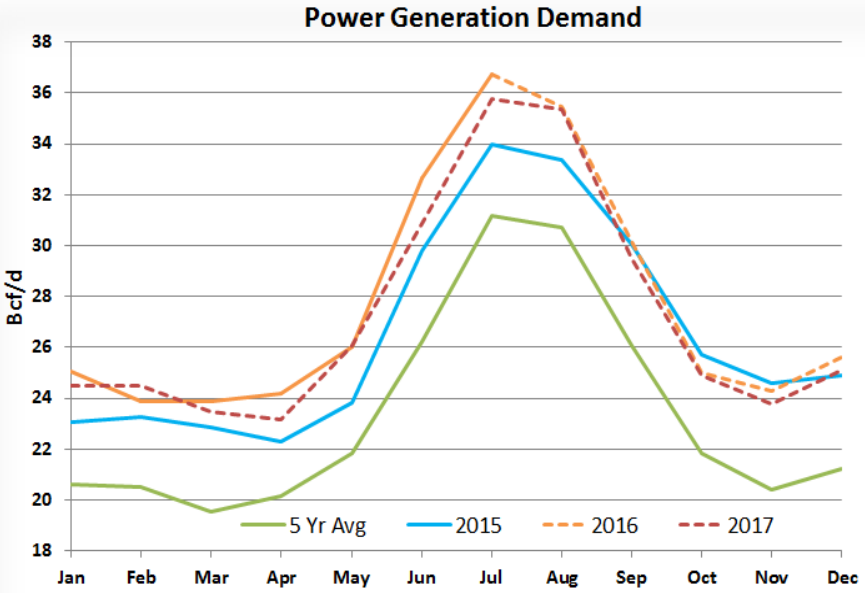
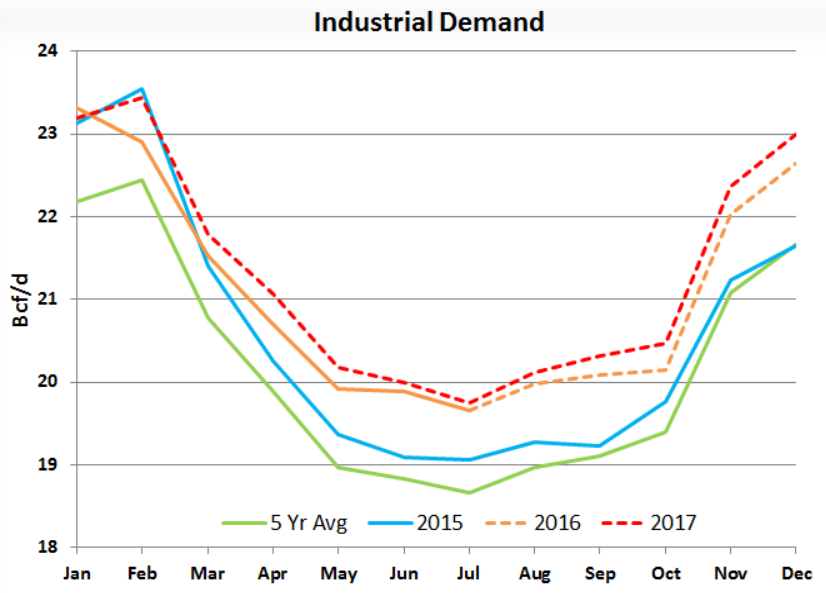
Demand Forecast by Sector



- 2016 demand forecast was revised 0.04 Bcf/d lower to 27.74 Bcf/d
- 2017 demand forecast was also revised 0.12 Bcf/d lower to 27.26 Bcf/d
- These downward revisions were likely made in response to the recent recovery in natural gas futures market

Source: EIA: Short Term Energy Outlook



- 2016 demand forecast was revised 0.07 Bcf/d lower to 21.06 Bcf/d
- 2017 demand forecast was revised 0.14 Bcf/d lower to 21.30 Bcf/d
- The EIA has made downward revisions to these forecasts in every monthly update this year

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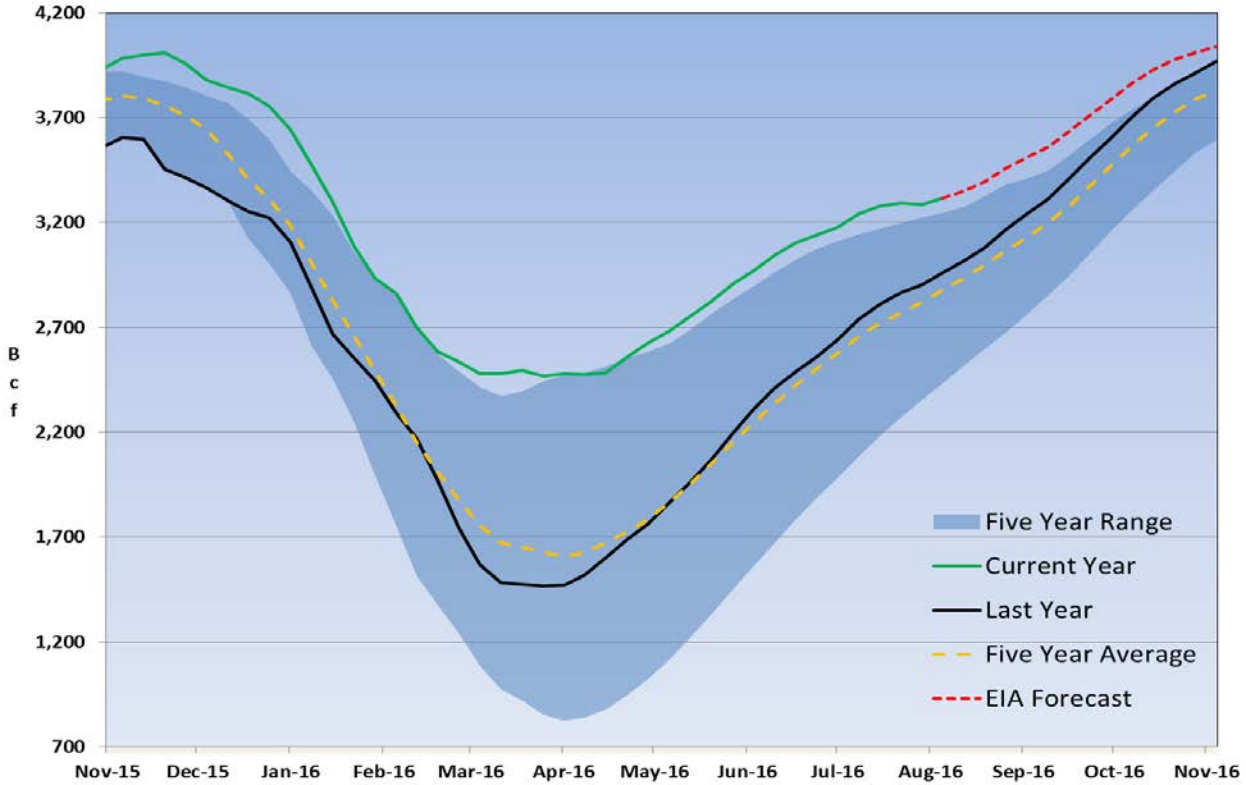
Natural Gas Storage Levels



- The EIA is forecasting an end-October storage level of 4.042 Tcf, but market expectations is much lower at about 3.935 Tcf.
- We saw the first net weekly withdrawal in a summer month since 2006 at the end of July and have seen consistently smaller-than-expected weekly injections this summer

Source: EIA

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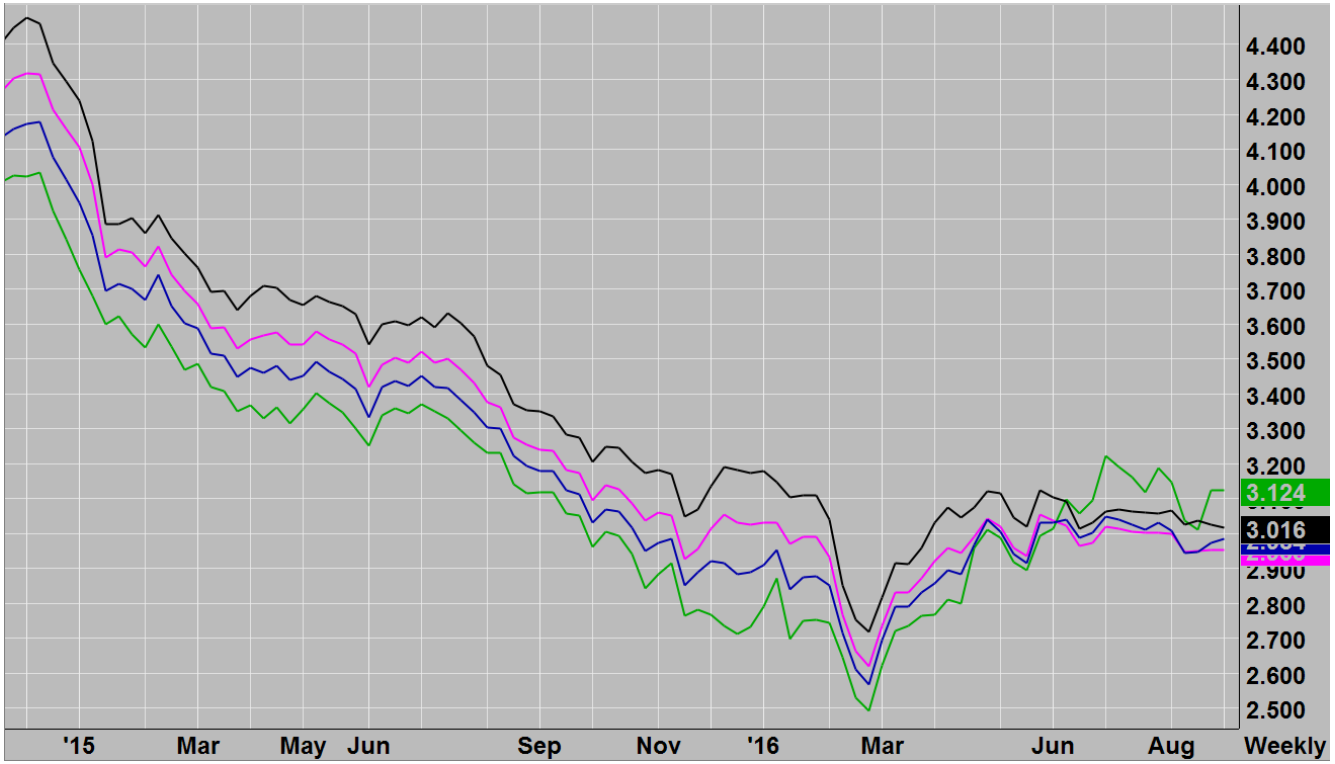
NYMEX Prices – Calendar Year (CY) Strips



- The forward curve remains backwardated with CY 2017 trading above 2018 – 2019 CY strips
- This is due to the continued downward trajectory of gas production and the assumption that production growth will resume and outpace demand growth through 2019

Source: FutureSource (Oracle Corporation), CME

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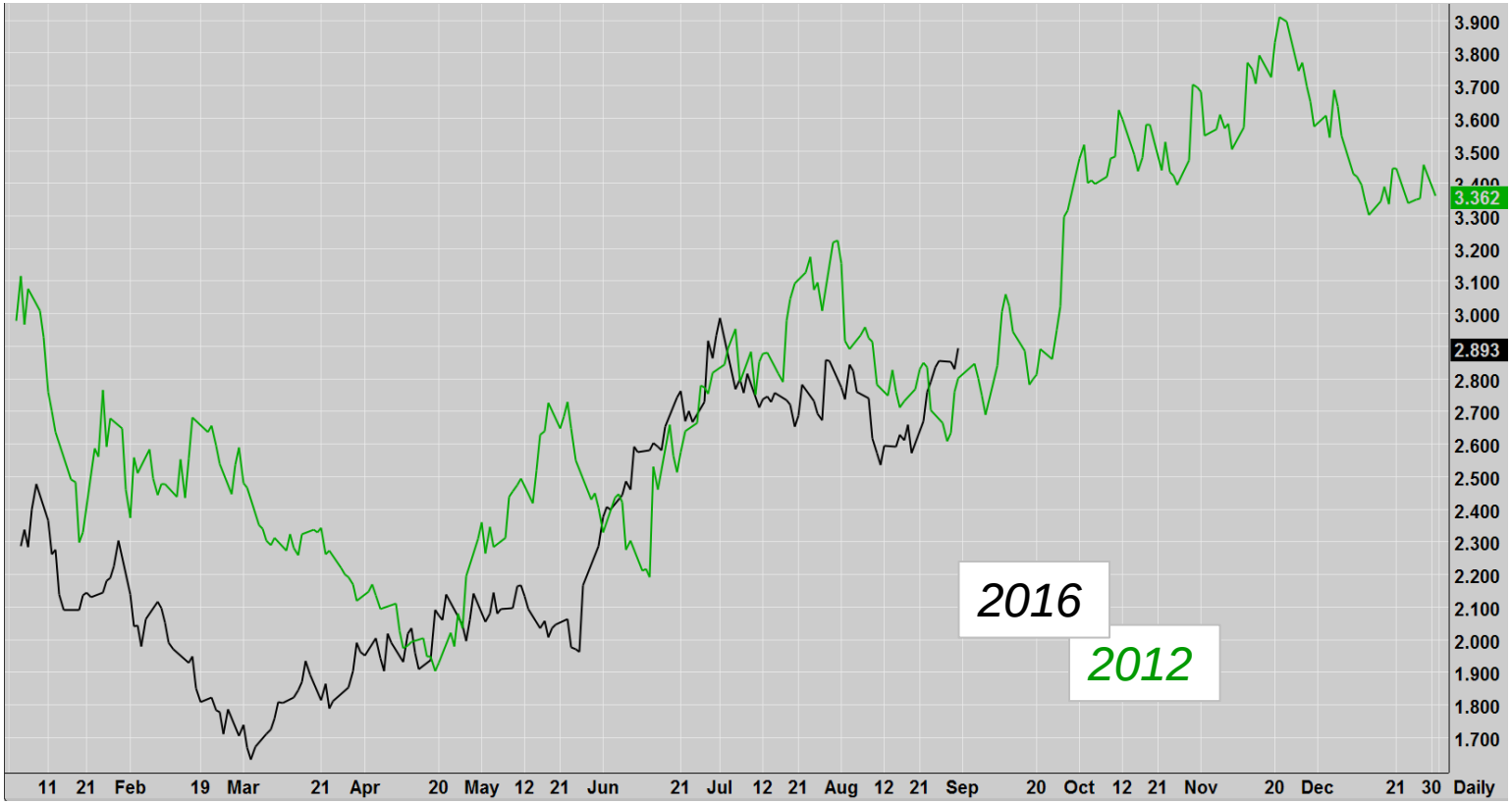
NYMEX Prices – 2016 versus 2012 (historical rolling prompt months)



Because of the near identical storage situations coming out the prior winters and the similar summer weather, 2012 is a good analog year for comparison

Source: FutureSource (Oracle Corporation), CME

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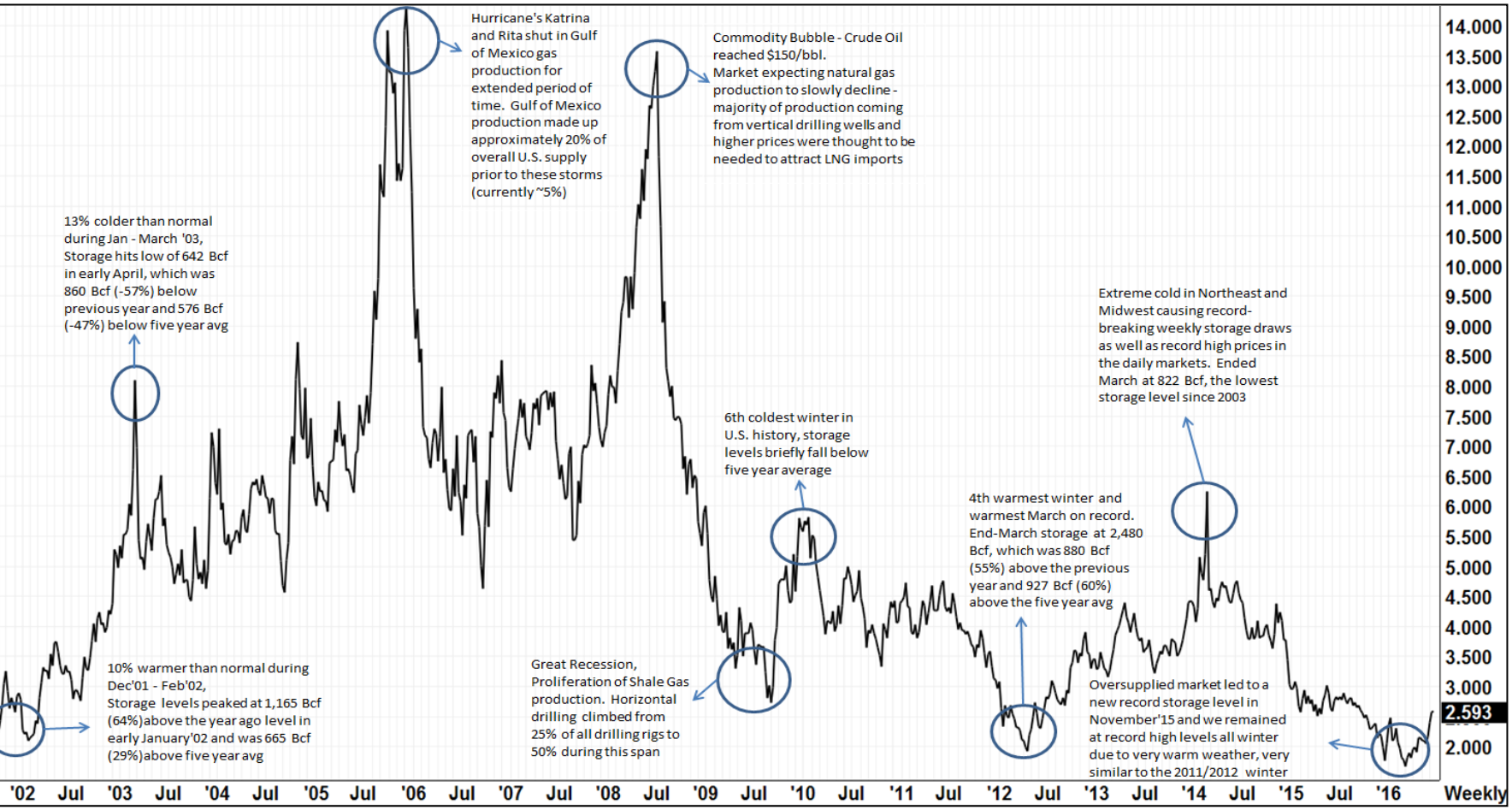
NYMEX Pricing History



Source: FutureSource (Oracle Corporation), CME, EIA

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Bull/Bear Market Summary

Production

- The EIA reported dry gas production fell from 73.61 Bcf/d in April to 72.96 Bcf/d in May
- The STEO estimates that production stabilized in May and has resumed growth, however these estimates are prone to downward revisions
- The EIA's Drilling Productivity Report indicates production in the most prolific gas plays has fallen 2.31 Bcf/d from February to July and forecasts 0.82 Bcf/d of declines through Sept.
- The latter report appears to be the more reliable data set as it aligns far better with private analytic companies

Storage

- Total working gas stocks reached 3.317 Tcf for the week ending Aug 5th
- The surplus to last year, which reached 1,017 Bcf back in March has declined to 359 Bcf, while the surplus to the five year average has narrowed from a peak of 874 Bcf to 441 Bcf
- The EIA has revised its end of October total storage level forecast up 20 Bcf to 4.042 Tcf
- With cash market prices persistently running higher than September futures in many regions, storage holders have been withdrawing gas or deferring injections to September

Imports/ Exports

- With imports from Canada expected to decline next year and exports to Mexico and LNG exports both expected to continue to grow, there is a good chance the U.S. becomes a net exporter of natural gas in 2017
- Imports from Canada should decline next year due to production growth in the Northeast and pipeline capacity and reversal projects reducing the need for Canadian gas
- Growing gas demand from Mexico's electric power sector coupled with flat natural gas production in Mexico will cause continued export growth

Weather

- La Nina typically means dry and warm summers, and cold and snowy winters in the north, which is what many forecasters including NOAA, Farmer's Almanac, and other private forecasters are calling for in their early winter outlooks
- PWCDDs came in 20.6% above normal in July, which was the third hottest month hottest month since 1950
- August got off to a very warm start , cooled a bit in the middle of the month, but ended hot and should come out about 20% above normal

Demand

- Weekly and daily demand data from various private analytics companies indicates only slight year over year gains in the industrial sector versus last year, but the EIA continues to show nearly 1 Bcf/d of demand gains through the remainder of the year
- The EIA's power generation demand forecast was revised lower for the second time this year, likely in response to the higher prices
- Evidence of any price induced losses in power generation demand is not readily apparent, but may be masked by the extreme heat this summer

Economy

- The ISM reported the July PMI figure declined to 52.6 from June's 53.2
- The BLS jobs report easily beat expectations in July as 255,000 jobs were added, and the unemployment rate remained unchanged at 4.9%
- The May and June jobs reports were both revised higher and the average number of job gains over the past three months was 190,000/month
- The Fed did not raise interest rates at their last meeting, and is unlikely to do so at their next meeting at the end of September, despite postulation to the contrary by some Fed officials

Summary

The September NYMEX futures contract pulled all the way back to the low $2.50s in response to moderating weather forecasts in the first half of August, but forecasts shifted warmer mid-month and prices recovered most of their losses with September rolling off the board at $2.853. The winter futures strip is currently priced at $3.23, off about 15 cents from its July highs. Extreme heat this summer has led to record gas demand from the power generation sector despite the recovery in gas prices making coal more competitive. Although the EIA has conflicting data in its various reports, consensus is production has continued to trend lower into the third quarter, and a rebound in production is unlikely to occur until the fourth quarter or possibly the first quarter of 2017. We remain cautiously bullish on natural gas prices the rest of this year and next given these factors, but expect continued vulnerability in the short-term from moderating weather and fuel switching dynamics. Ultimately, gas price

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Question & Answer Panel

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Summary and Closing Remarks

Closing video

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Thank you for attending!

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