



# ENERGY SECURITY

THE CHALLENGE OF INVESTING FOR  
THE FUTURE IN UNCERTAIN TIMES

2.03.12

Two decorative squares, one light blue and one orange, are positioned to the left of the slogan.

*FOCUSED ENERGY. For life.*

# Safe, reliable & affordable power is essential



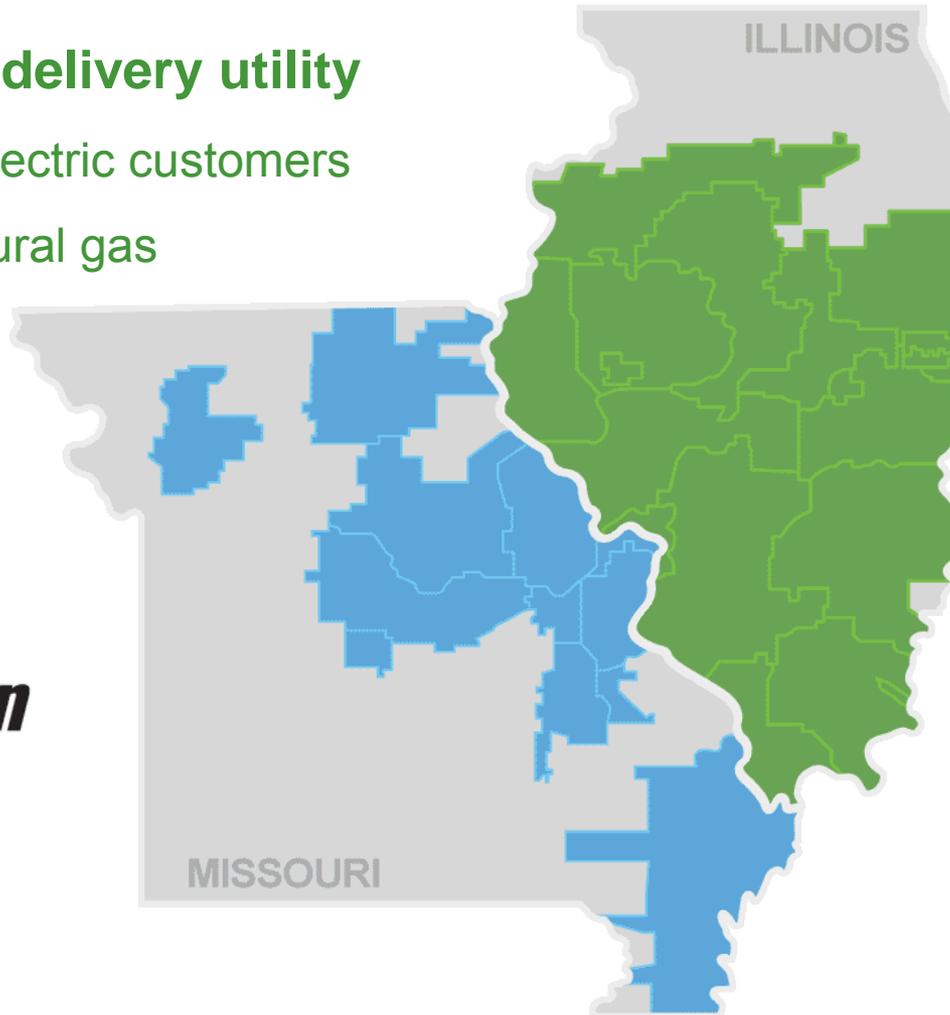


What do  
we do

# Your state utilities

## Generation & delivery utility

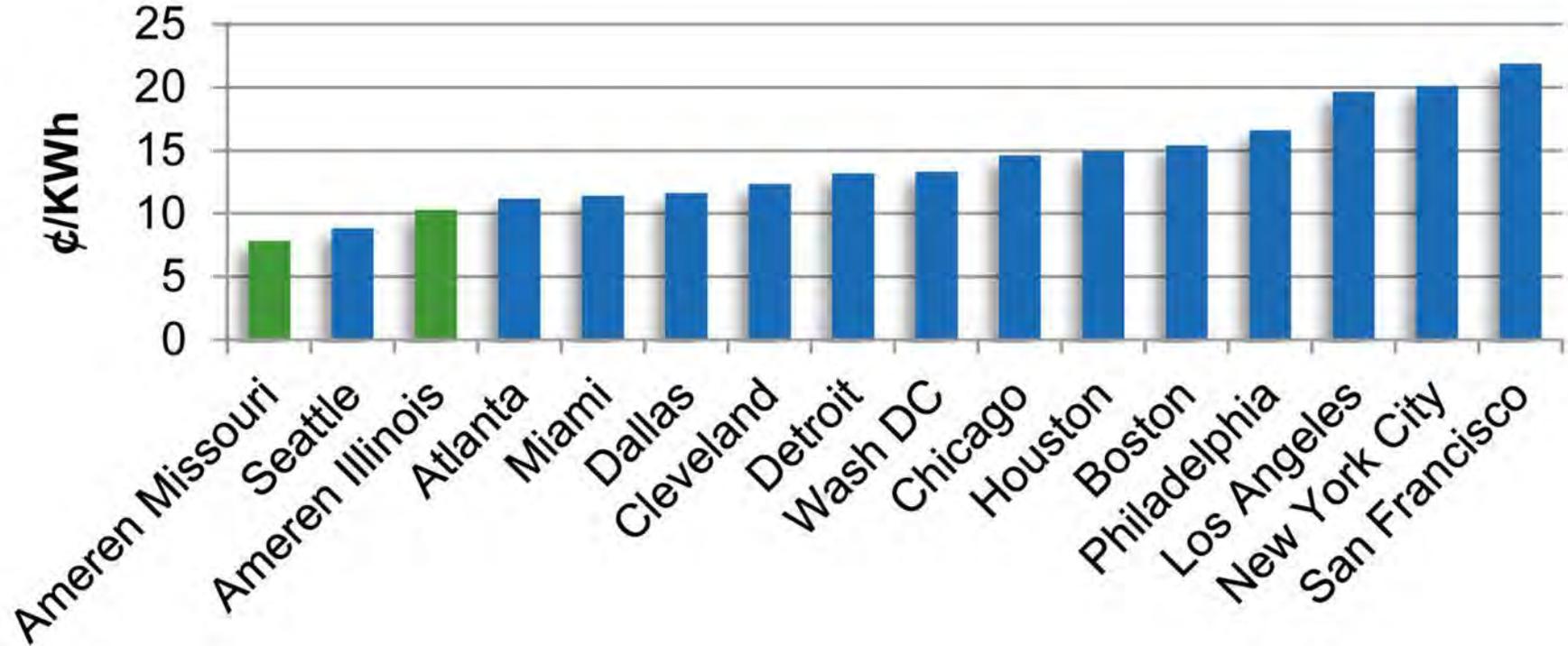
- 1.2 million electric customers
- 126,000 natural gas customers



## Delivery utility

- 1.2 million electric customers
- Over 800,000 natural gas customers

# Affordable power for our region



Average Residential Electricity Prices—Source: Bureau of Labor Statistics and Winter 2011 EEI Typical Bills and Average Rates Report

# Merchant Generation & Transmission



# Transmission: Investing for the future



- Enhance reliability
- Create jobs
- Access to renewables

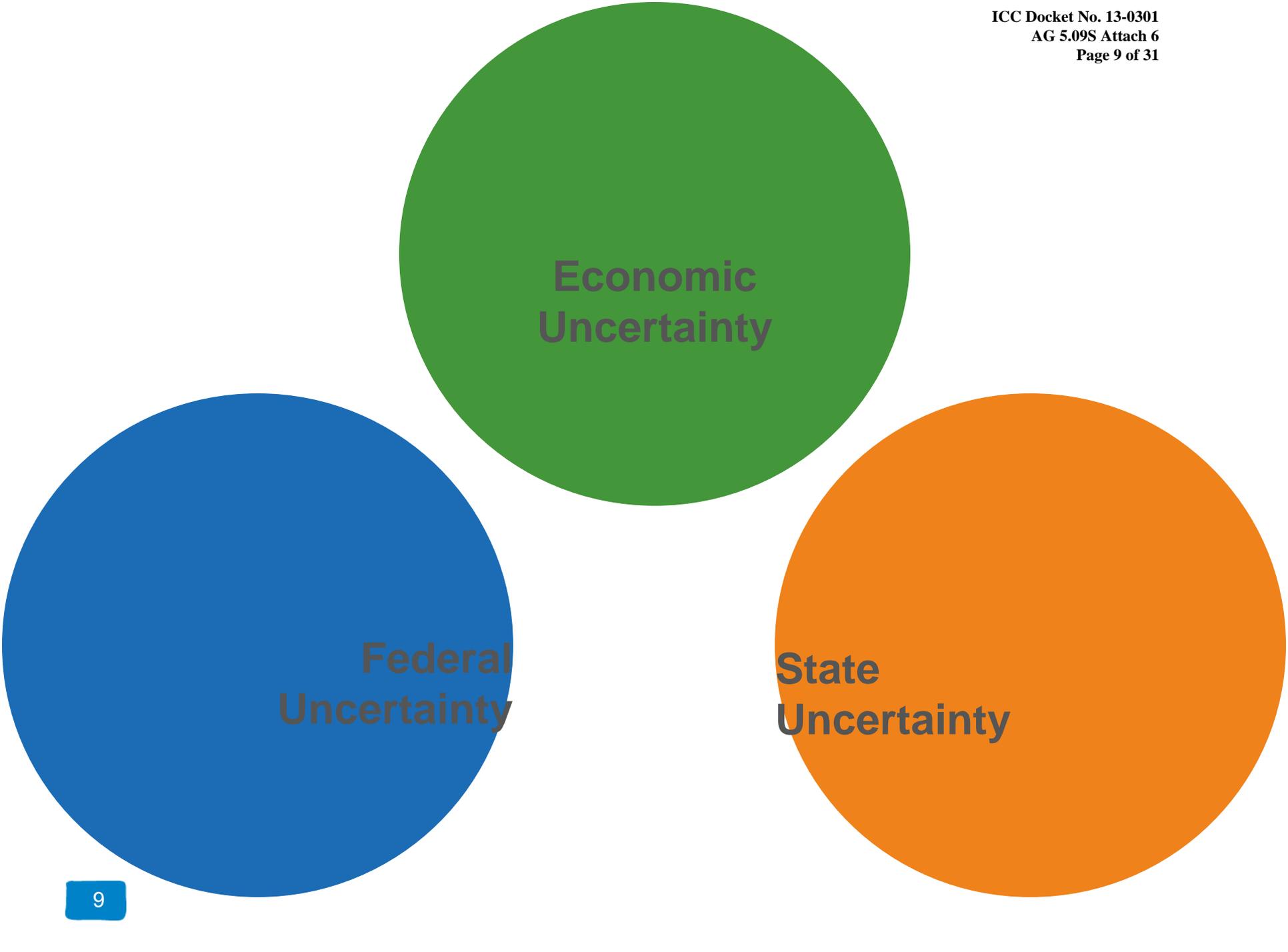
**\$1.3**

**billion over a decade**

# Leading the way to a secure energy future



VISION



**Economic  
Uncertainty**

**Federal  
Uncertainty**

**State  
Uncertainty**



# Economic Uncertainty

# Double dose of uncertainty

## U.S. natural gas prices fall to decade low

Jan. 19, 2012 (FT.com) - US natural gas prices have slid to their lowest point in a decade and the industry declines as the shale rock drilling boom re-landscape. The price collapse - down 85% high in 2005 - could benefit heavy industry to hurt companies such as ExxonMobil and have spent billions of dollars over the past natural gasfields in the US.



Gas futures on per million Btu New York Mercantile weakest since by 22.3 per cent analysts believe by strong production from shale forma

## Will shale crowd out coal and green energy?

Jan. 4, 2012 (Energybiz.com) - Now that France's Total and China's Sinopec have invested \$4.5 billion in two of this country's premier natural gas developers, common wisdom is suggesting that the fate of shale-gas here will outshine all competing energy forms. But is that logic well considered?

Estimates are that at least a century's worth of shale-gas is now recoverable from underneath America's feet. Some are betting that such volume will drive down the cost of that fuel, making the alternatives unattractive.

"With the new abundance and lower prices, lower-carbon gas seems likely to play a much larger role in the generation of electric power," writes Daniel Yergin, in his new book "The Quest." By comparison, nuclear would seem expensive.

## How a gas boom became a glut

(Philly.com) Pennsylvania's roller coaster are back their restraining imposed to change producing nausea y for others.



of powerful forces - Mother Nature and supply and demand ve at least a short-term impact on natural-gas drilling in the s, full storage facilities, reduced use due to a mild winter, pound industrial demand will likely slow down the industry t, and more likely longer. The state and the nation are rary plateau in the natural-gas boom, with consequences l negative.

# Double dose of uncertainty

## Electricity declines 50% as shale spurs natural gas glut

Jan. 17, 2012 (Bloomberg.com) – A shale-driven glut of natural gas has cut electricity prices for the U.S. power industry by 50 percent and reduced investment in costlier sources of energy.

With abundant new supplies of gas making it the cheapest option for new power generation, the largest U.S. wind-energy producer, NextEra Energy Inc. (NEE), has shelved plans for new U.S. wind projects next year and Exelon Corp. (EXC) called off plans to expand two nuclear plants. Michigan utility CMS Energy Corp. (CMS) canceled a \$2 billion coal plant after deciding it wasn't financially viable in a time of "low natural-gas prices linked to expanded shale-gas supplies," according to a company statement. Power producers' profits are deflated by cheap gas because electricity pricing historically has been linked to the gas market.

## Shale drilling affects rest of energy sector

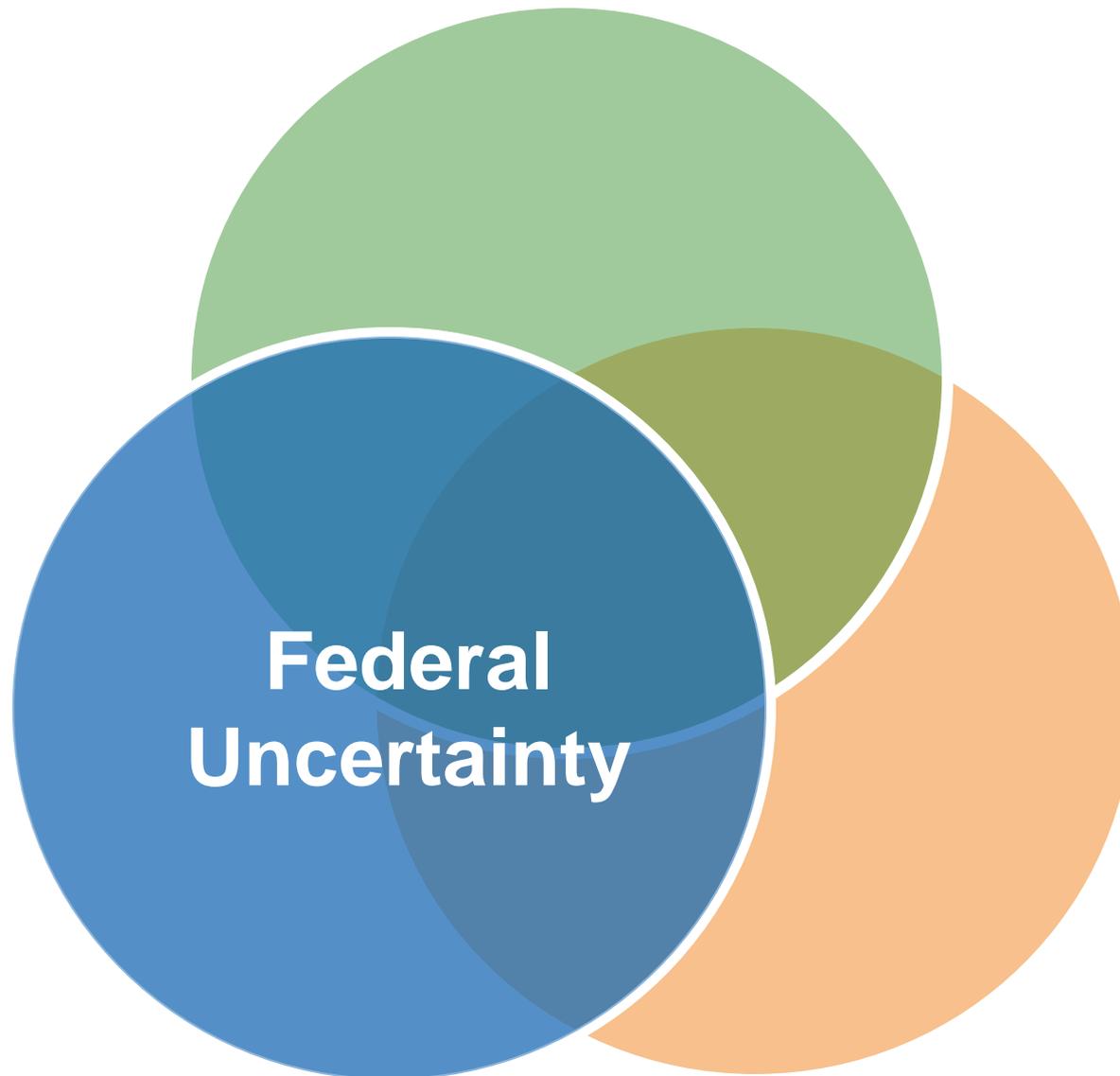
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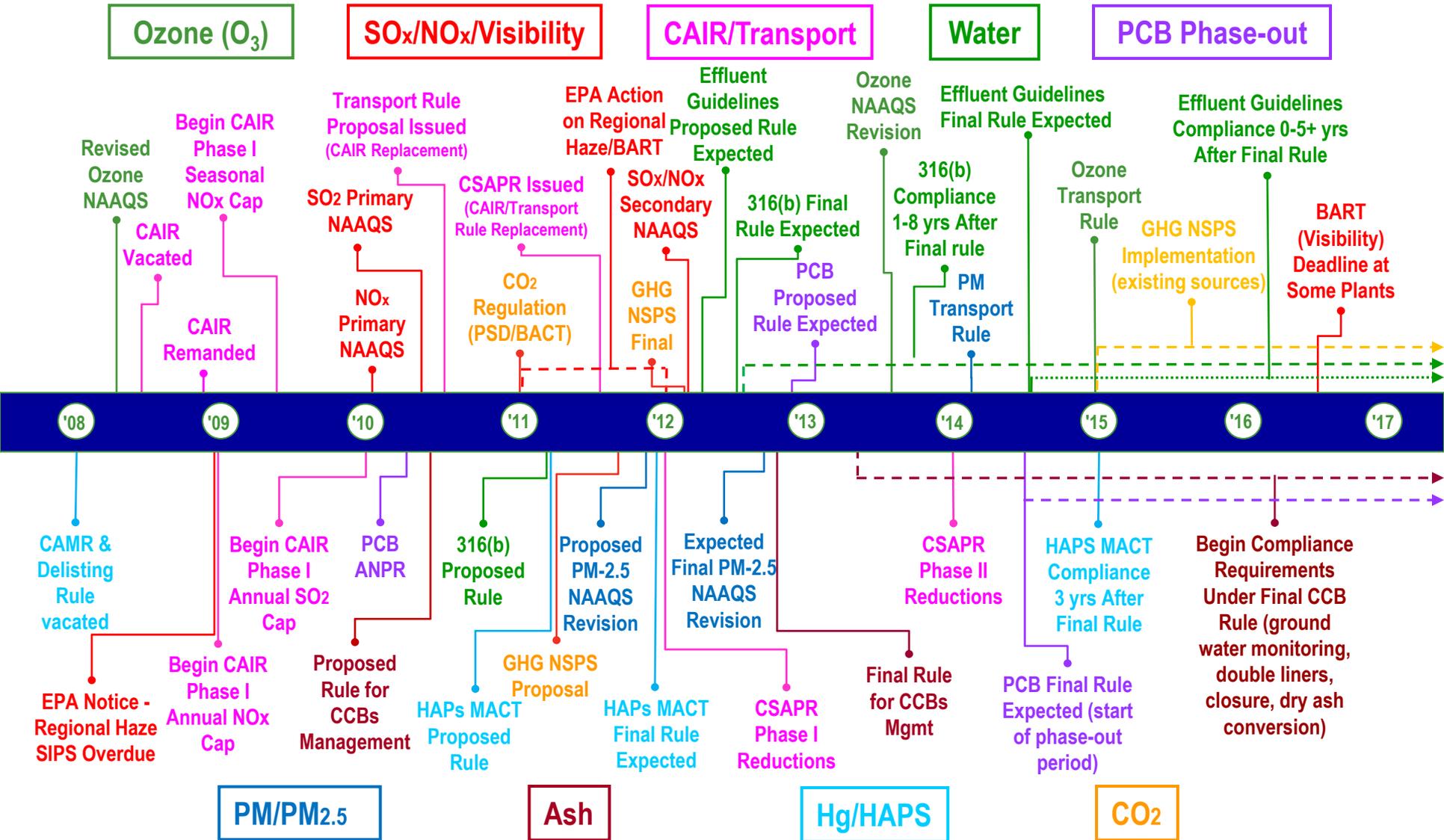
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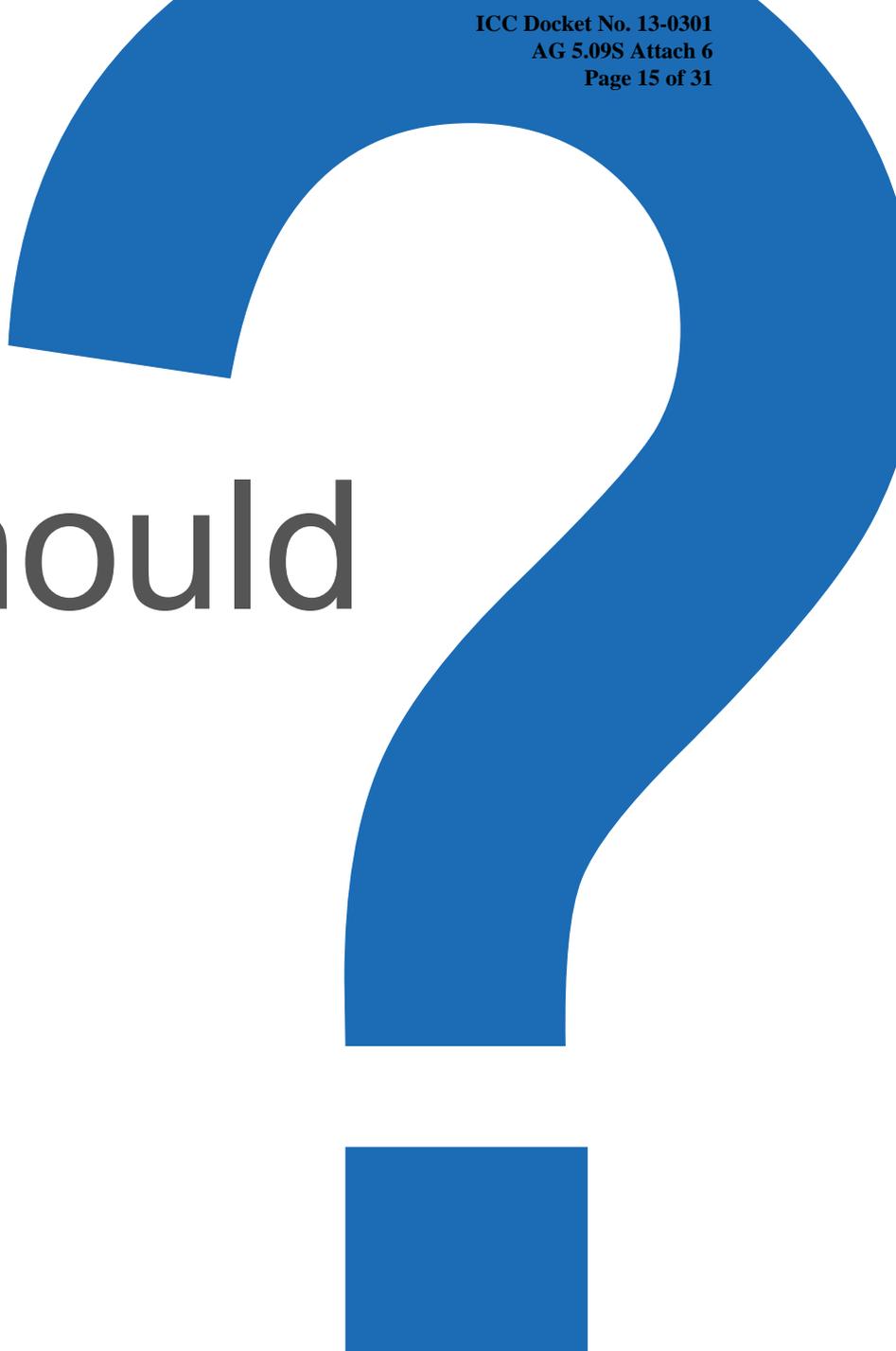


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During the gas market, wholesale electricity prices have dropped more than 50 percent on average since 2008.





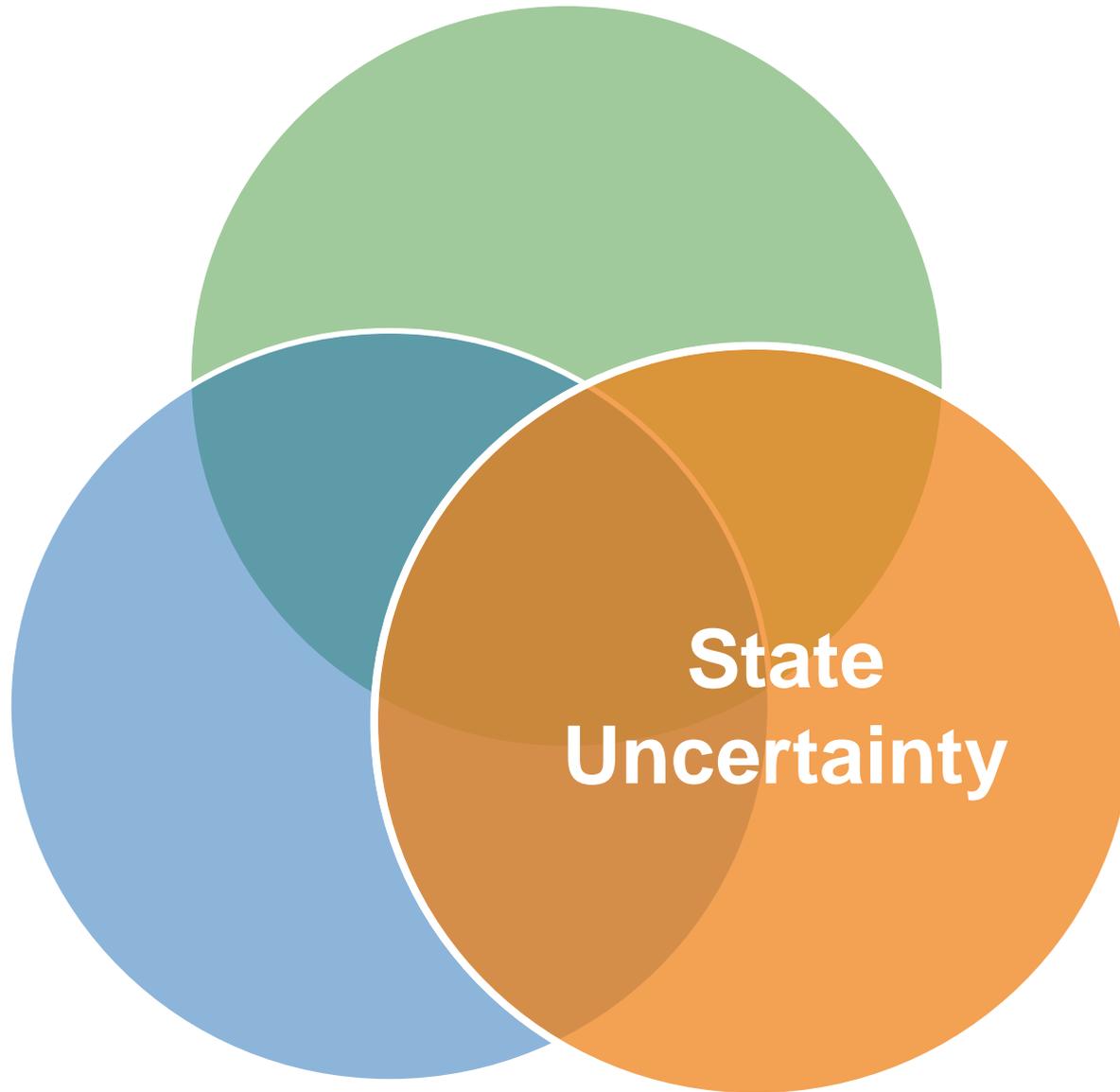


What should  
we do

# Innovate & anticipate

- **We strive to:**
  - Remain flexible
  - Remain a leader in our industry
- **We believe:**
  - Regulations should be designed responsibly
  - Everyone should follow rules





# States with renewable standards or goals

