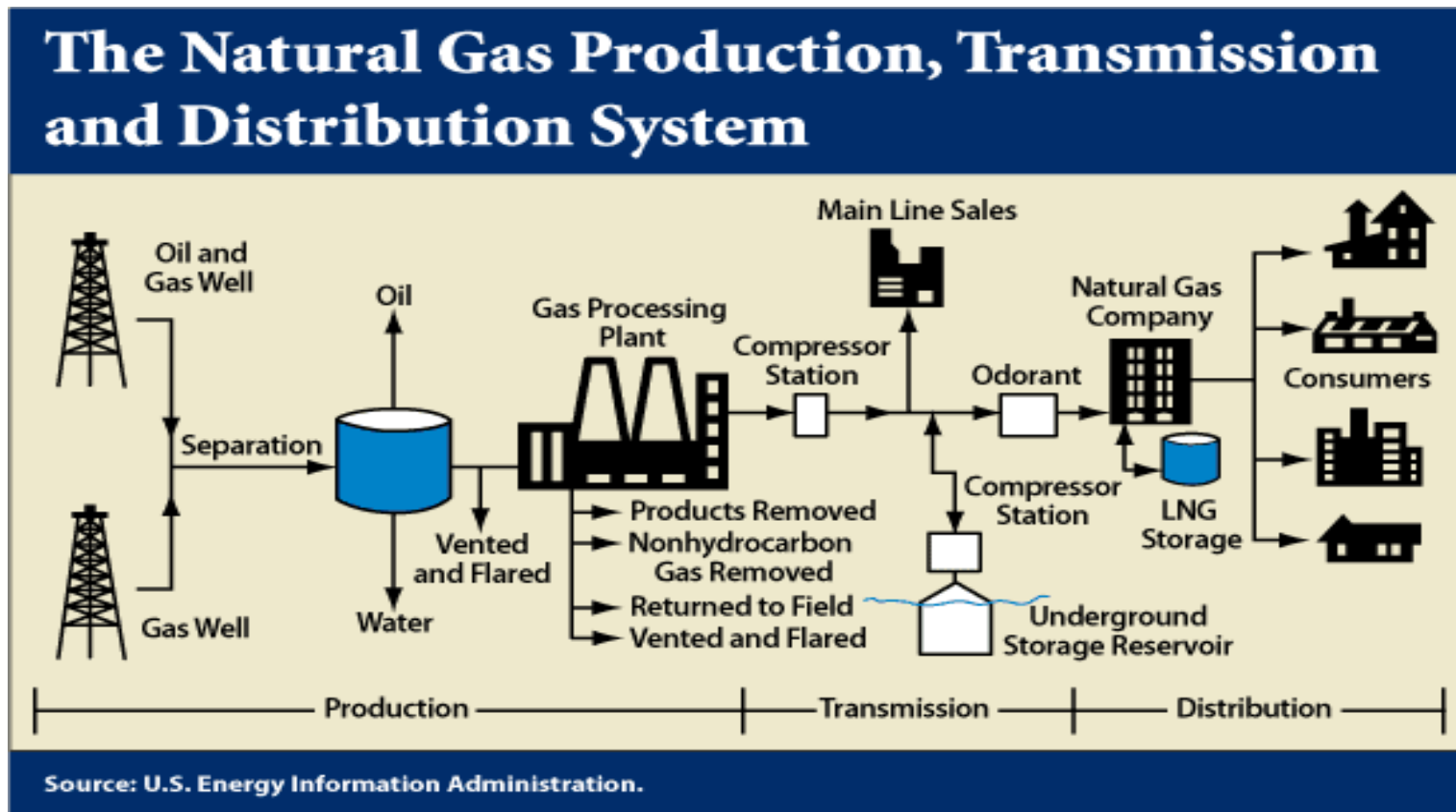




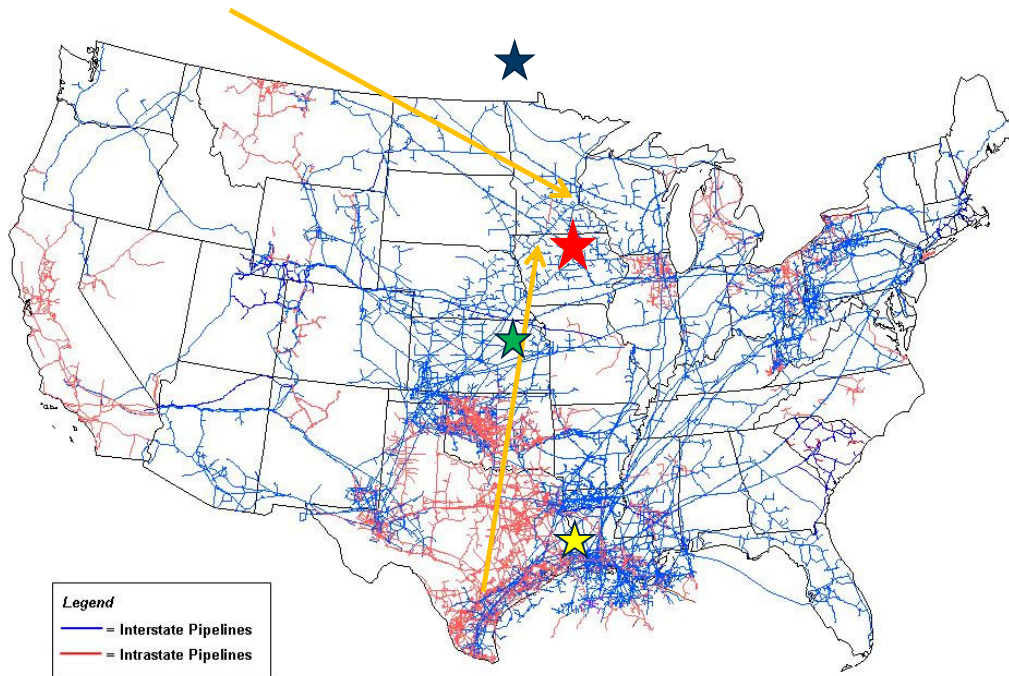
# Natural Gas in North America

Adam Heinen | Public Utilities Rates Analyst

# Natural Gas Markets in North America



# Pipelines – North America



Source: Energy Information Administration, Office of Oil & Gas, Natural Gas Division, Gas Transportation Information System

- ★ Emerson Hub—Pricing Point for Canadian Gas
- ★ Ventura Hub—Primary delivery and pricing point for gas to Minnesota
- ★ Demarcation Hub—Dividing point between Northern Field and Market Area. Alternate delivery and pricing point for gas to Minnesota
- ★ Henry Hub—Nameplate financial pricing point for natural gas

# Comparison of 2019 to 2021

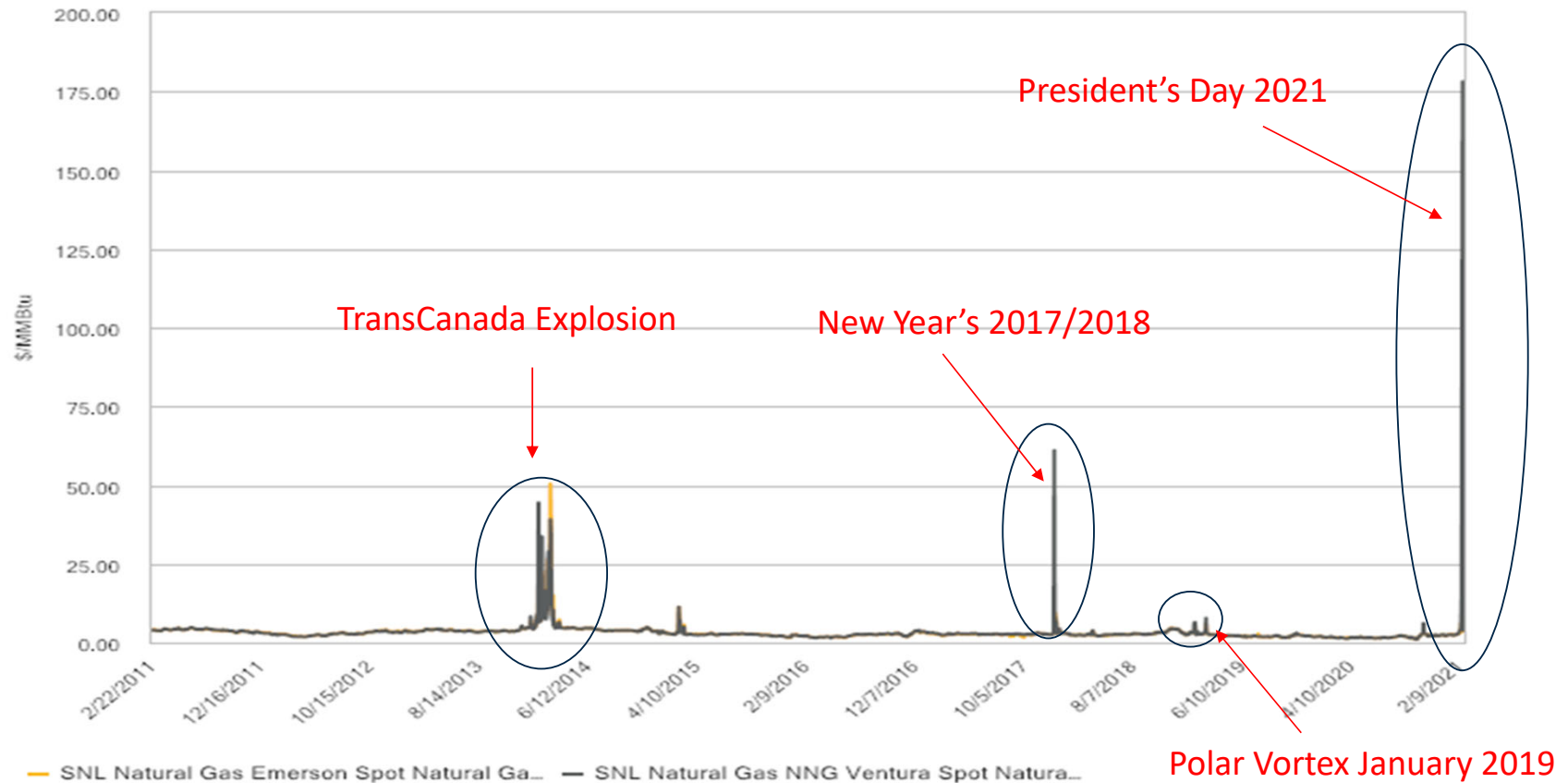
## January 2019 Event

- Isolated distribution and reliability issues caused by weather conditions
- Coldest weather in Minnesota since 1996 with many utilities approaching design-day and distribution planning objectives
- Conditions lasted for less than a week and were focused primarily in the Upper Midwest
- Cold weather event resulted in a Commission investigation (Docket No. G999/CI-19-160)

## President's Day 2021 Event

- No reliability or deliverability issues for Minnesota LDCs, appears that potential cost issues are based on market forces
  - Run up in prices analogous to conditions over New Year's 2017/18
  - Prices at Ventura reached \$300 per Dekatherm
- Cold conditions persisted in the Upper Midwest for approximately two weeks with the coldest conditions occurring later in the event
- Conditions in Minnesota did not reach the Commission's design-day planning objective of the coldest 24-hour average temperature (-25F for the Twin Cities)
- Preliminary data suggest that certain locations in Minnesota approached utility distribution planning objectives
- Weather conditions were extreme across large portions of the Midcontinent including the Southern United States

# 10-Year Historical Spot Prices



# Gas Planning and Procurement

- Utilities typically review previous heating season performance and then create a gas purchasing plan in the spring for the upcoming heating season
- What is in a gas purchasing plan?
  - How much gas will be needed?
  - When to purchase gas
  - What types of products will be purchased to serve customers?
- Peak day or design-day
- Distribution planning



# Minnesota Natural Gas Cost Recovery

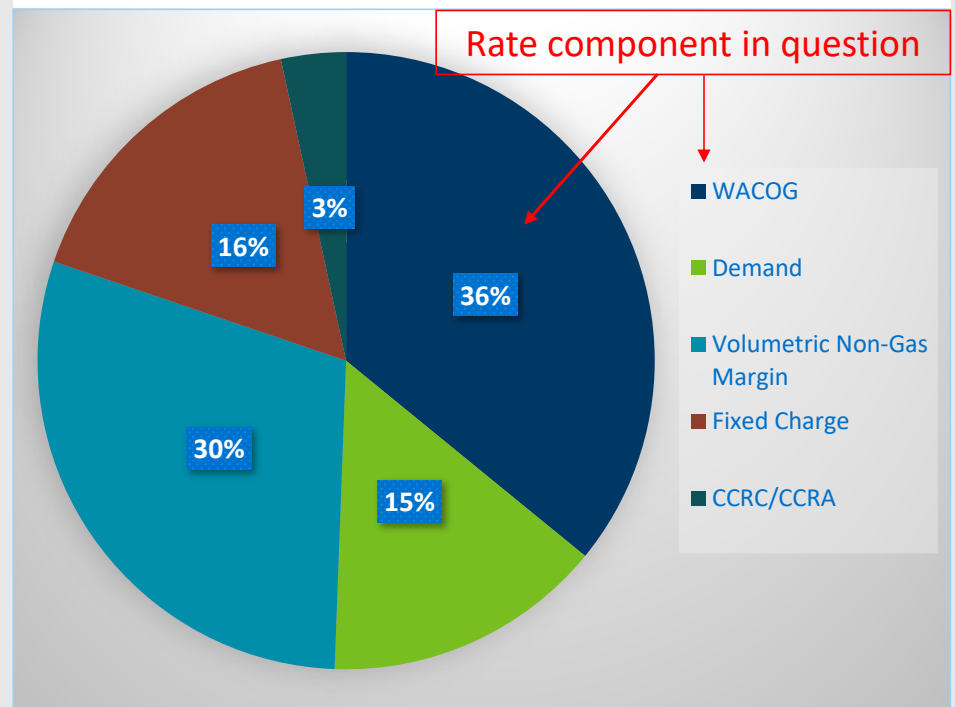
Angela Byrne | Public Utilities Financial Analyst

# Natural Gas Bill Breakdown

## Parts of Bill

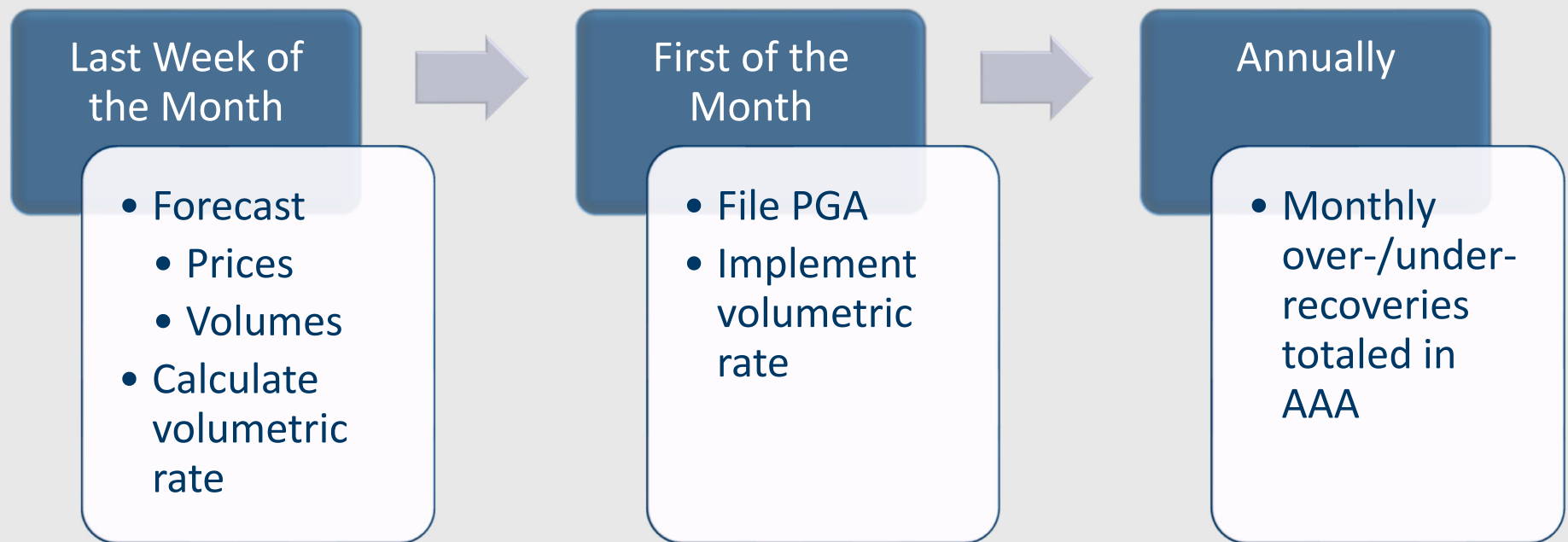
- Non-Gas Margin
  - Volumetric Rate and Fixed Charge
- Gas Costs
  - Weighted Average Cost of Gas (WACOG)
  - Demand Costs (Capacity)
- Conservation Cost Recovery Charge and Adjustment (CCRC/CCRA)
- Gas Affordability Program
- Other potential charges
  - New Area Surcharge
  - Gas Utility Infrastructure Cost Rider
  - Natural Gas Extension Project Rider

## Bill Breakdown

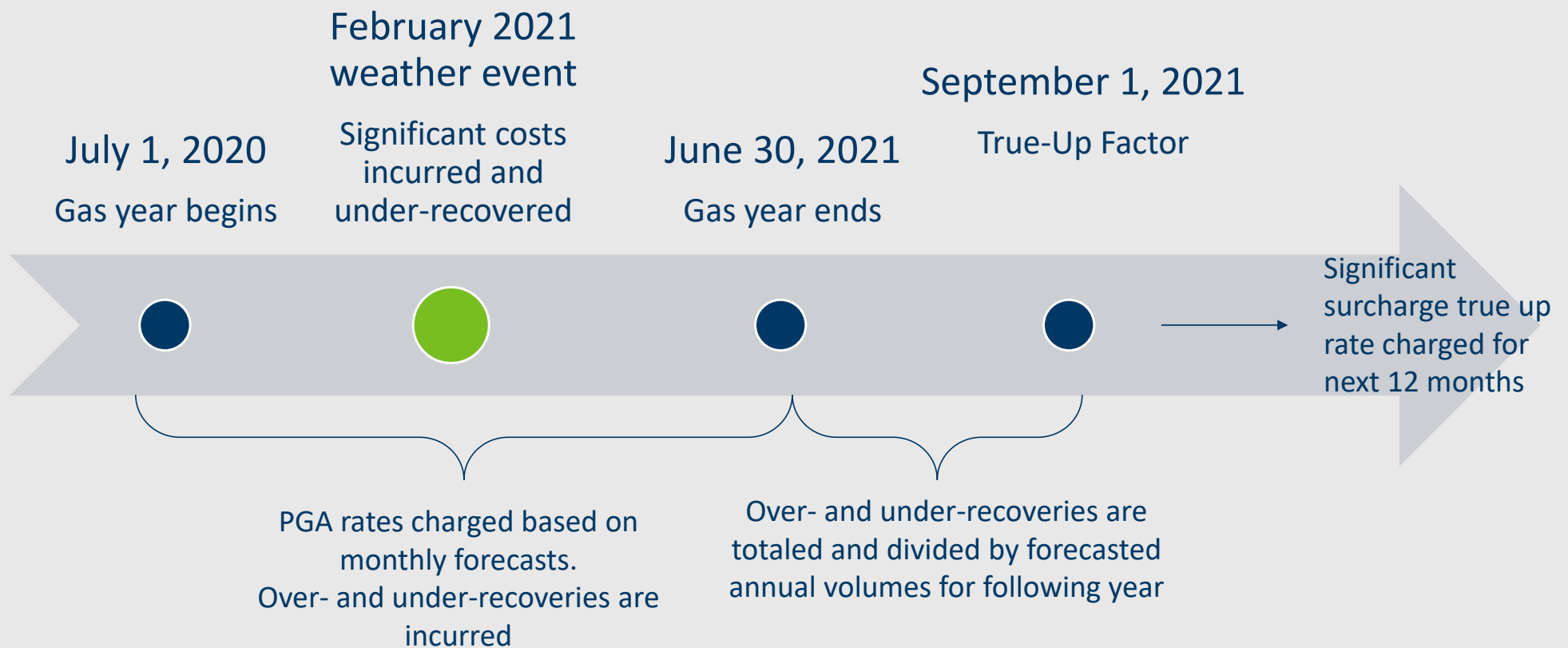




# Monthly Purchased Gas Adjustments (PGAs)



# Annual Automatic Adjustment Reports (AAA)



# Gas Cost Review

## Typical Circumstances

- Evaluation of trends and events in:
  - Actual weather
  - Market prices
  - Natural gas storage
- Over- and/or under-recovery of gas costs
- Hedging practices
- Out-of-period adjustments

## February 2021 Pricing Event

- Gas procurement plan post-mortems
- Timing of the price increases
- Economic curtailments
- Balancing hedging with daily requirements
- Purchasing strategies
- Offsetting relief or revenues

# Intersecting Dockets

## Known:

- Commission Investigation (if opened)
- 2021 AAA Report and related true-ups

## Potentially:

- Demand Entitlements
  - Changes to gas procurement practices
- Gas Hedging Variances
- COVID Deferred Accounting
  - Bad debt expense