



# ERCOT – The Big Chill

The Lone Star State of Emergency  
2/18/2021

## EnergyGPS – Who are we?

- Energy Product (Vendor) and Consulting Company
- Former Traders – Enron, UBS, Saracen Energy
- Fundamental Approach – Inflection Points, Supply/Demand
- Enjoy the energy puzzle

# EnergyGPS – Product Offerings

## Product – North America

- Natural Gas
- Power

## Consulting

## Newsletter

- Packages  [eCommerce](https://www.energygps.com/eCommerce)
- Advisory Hours Plus  [sales@energygps.com](mailto:sales@energygps.com)

  
[sales@energygps.com](mailto:sales@energygps.com)

# EnergyGPS – Product Offerings

## Newsletter

- Free Blog – [www.energygps.com](http://www.energygps.com)
  - Packages
    - Silver
    - Gold
    - Platinum
    - **Platinum Plus**
  - Advisory Hours Plus
  - **One-Off Consulting Coupon**
- Diagram illustrating connections:
- A bracket groups Silver, Gold, and Platinum, with an arrow pointing to [eCommerce](#).
  - Platinum Plus has an arrow pointing to [sales@energygps.com](mailto:sales@energygps.com).
  - Advisory Hours Plus has an arrow pointing to [sales@energygps.com](mailto:sales@energygps.com).
  - One-Off Consulting Coupon has an arrow pointing to [eCommerce](#).



# ERCOT – The Big Chill

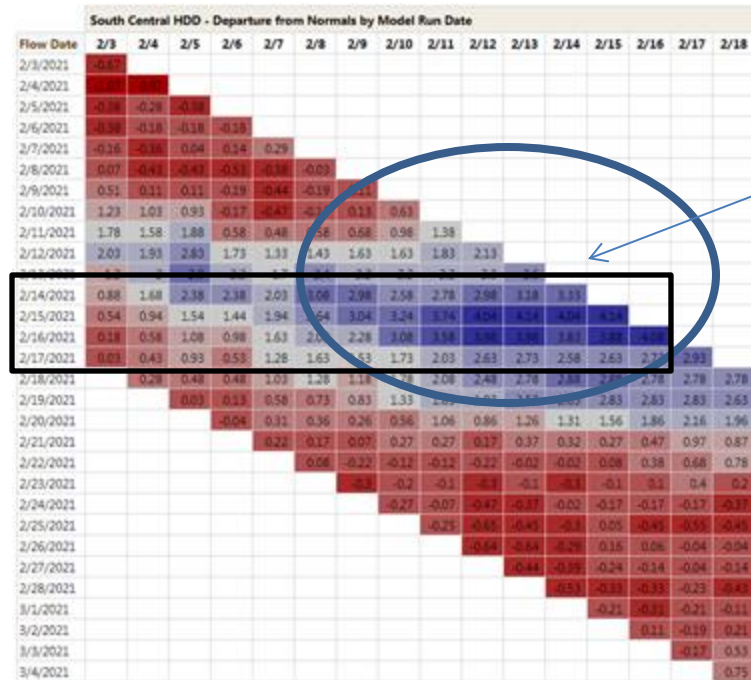
- How did we get here?
- When does it end?
- Where do we go from here?
- Questions

# ERCOT – The Big Chill

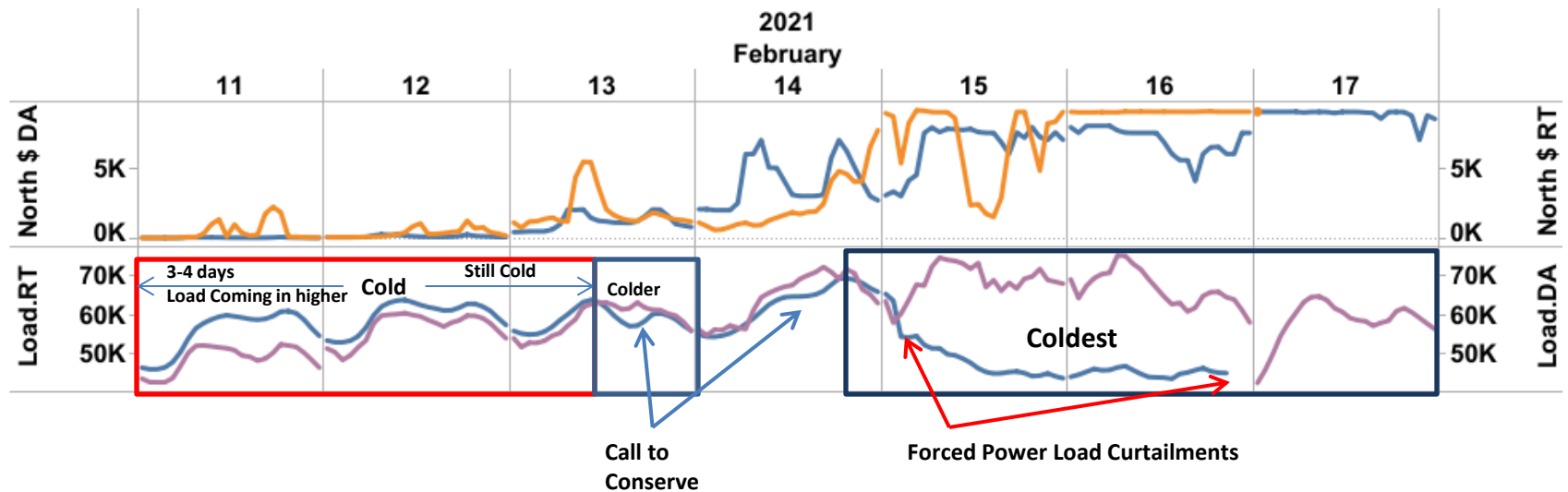
- **How did we get here?**
- When does it end?
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- Questions

# The Chill – How did we get here?

- Cold
- Colder
- Coldest



# The Chill – How did we get here?

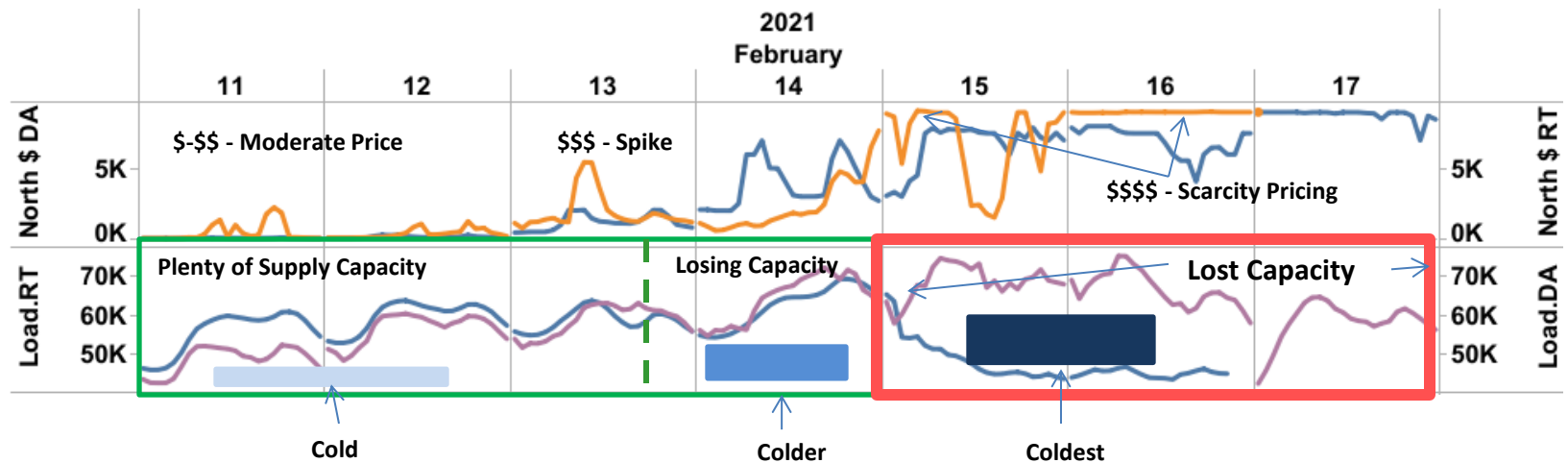


## Power Demand

- Cold – 4-5 days of power demand coming in over day-ahead forecast
- Colder – Load Serving Entities/State Officials calling for conservation
- Coldest – Forced Load Curtailments in play – held over the weekend



# The Chill – How did we get here?

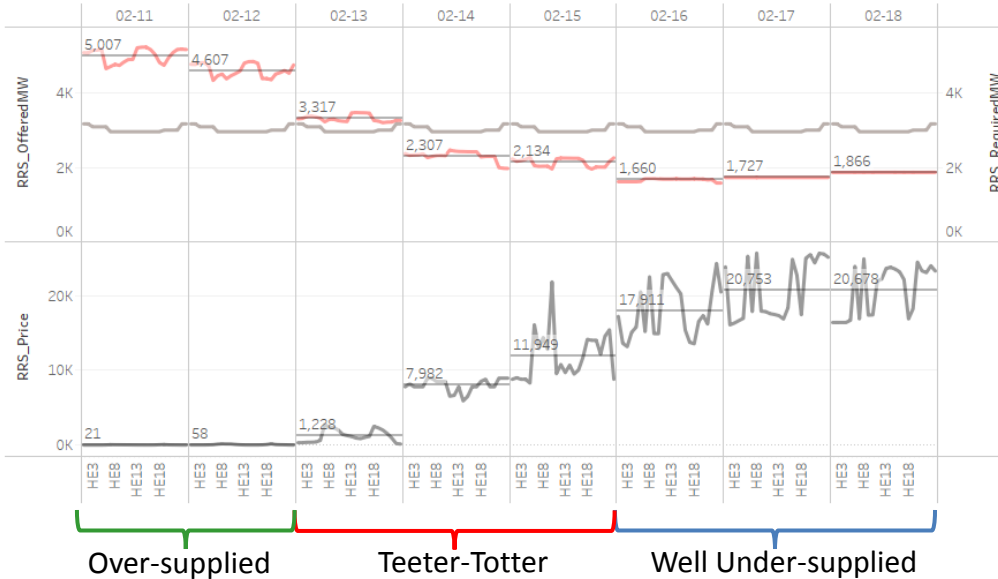


## Switch from Demand to Supply Issue – Power/Natural Gas

- **Cold** – Power Capacity Holding/Plenty of Natural Gas – some price reaction
- **Colder** – temperatures dropping
  - Losing natural gas production – freeze offs on producing regions, pipeline pressure issues
  - Thermal power plant capacity lost due to natural gas issues, renewable output reduction
- **Coldest** – wind chill feel in Dallas minus 8 degrees – BRRR
  - Lost Power Generation Capacity – mandatory power reduction at 2:00 am on 2/15
  - ERCOT under high alert status 24/7

# The Chill – Supply Lost Indicator Responsive Reserve Market (RRS)

Responsive Reserve Breakout



## Capacity Market - RRS

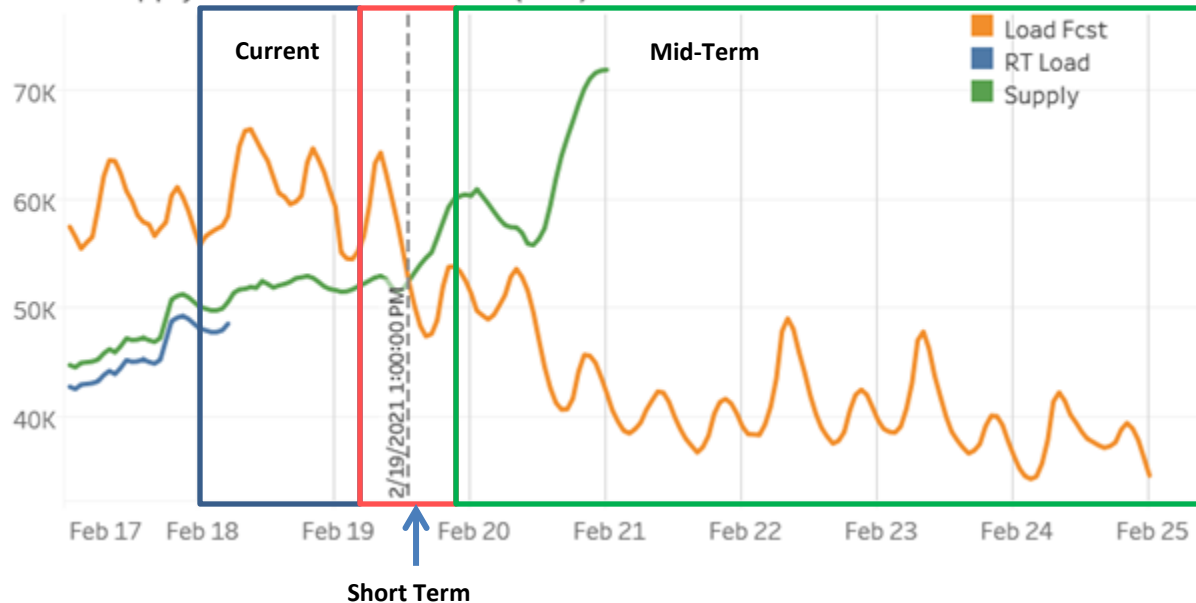
- **Over-supplied**
  - Pre-Chill – 6 plus GW - \$12-\$18
  - Cold – 5 to 4.6 GW - \$21 to \$58
- **Teeter-Totter around Requirement (2.9 GW) - Colder**
  - 2/13 – 3.3 GW - \$1,228
  - 2/14 – 2.3 GW - \$7,982
  - 2/15 – 2.3 GW - \$11,949
- **Well Under-supplied - Coldest**
  - 2/16 – 1.66 GW - \$17,911
  - 2/17 – 1.73 GW - \$20,753
  - 2/18 – 1.866 GW - \$20,678

# ERCOT – The Big Chill

- How did we get here?
- **When does it end?**
- Where do we go from here?
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# The Chill – When does it end?

ERCOT Supply and Demand Forecast (MW)



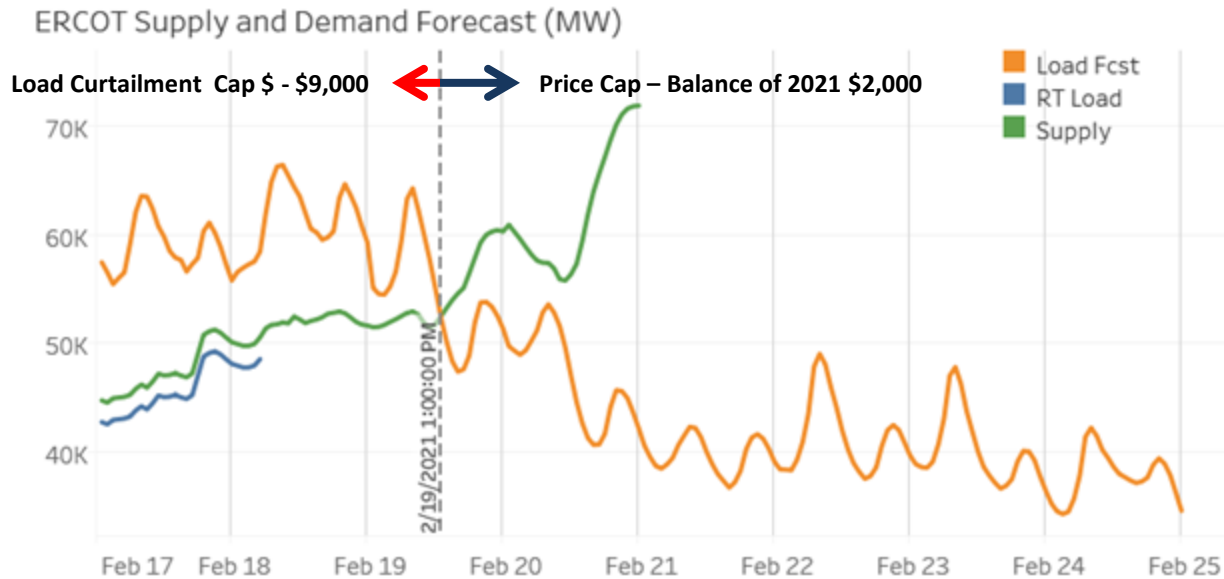
## Power Supply Returns

- **Thermal**
  - Coal – Warmer Weather
  - Natural Gas - Supply
- **Renewable Energy**
  - Wind – Warmer Weather
  - Solar – Sunny Skies

## Demand Shifts Lower

- **Current**
  - Overnight Lows still in play
  - Forced Curtailments follow the supply capacity available
- **Short-Term**
  - 24 hour window
  - Thermal capacity needs to track upward
  - Warming up
- **Mid-Term (Summer)**
  - Price Cap Calculation
  - Summer Exposure
    - Economy
    - Outages
    - Wind/Solar Generation

# The Chill – When does it end?



## Pre – February 19<sup>th</sup>, 2021

- Power Supply Capacity
- Wind Generation
- 19<sup>th</sup> Morning Ramp
- Price Cap Trigger (Out of the woods)

## Post-February 19<sup>th</sup>, 2021

- Warming up
- Power Demand back to normal
- Price Cap change within ERCOT for balance of the summer (Peaker Net Margin exceeded)

# ERCOT – The Big Chill

- How did we get here?
- When does it end?
- **Where do we go from here?**
- Questions

# The Chill – Where do we go from here?

## Oversight

- **Committee Formation - Reliability**
  - Electricity
  - Natural Gas
- **ERCOT Summary Reports/Webinar**

## Carnage – Financial Problems (Special Report – Platinum Package) 📞

- **Float**
- **Short Energy**
- **Basis Risk**
- **Short Reserves**
- **Short Pay/Credit Risk**
- **Forward MTM**

## Summer and Beyond 📞

- **2021 Price Cap in play**
- **New Build/Retirements**

# ERCOT – The Big Chill

- How did we get here?
- When does it end?
- Where do we go from here?
- **Product Offerings**
- Questions



# EnergyGPS Product Offerings

## Product ([sales@energygps.com](mailto:sales@energygps.com))

- Natural Gas
- Power

## Newsletter

- Free Blog ([www.energygps.com](http://www.energygps.com))
- Packages
  - [Platinum \(Monthly or Annual\)](#) – eCommerce
  - Platinum Plus ([sales@energygps.com](mailto:sales@energygps.com))
- Advisory Hours Plus Platinum Package ([sales@energygps.com](mailto:sales@energygps.com))
-  [45 Minute Consulting Coupon](#)

# EnergyGPS Product Offerings

## Platinum Recent Reports

- ERCOT ‘Bond’ing with Baseball
- ERCOT’s Red River Showdown
- ERCOT – R for Reliability
- Financial Carnage from the Arctic Blast
- Capping ERCOT’s Price
- Responsive Reserves 101

# ERCOT – The Big Chill

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- Where do we go from here?
- **Questions**

# Contact Information

- **Product/Consulting Contact Information**
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- **EGPS Product Sales**
  - Newsletter Packages | [Gold or Platinum](#)
  - Email | [sales@energygps.com](mailto:sales@energygps.com)
- **Newsletter Blog** – [www.energygps.com](http://www.energygps.com)