



# Impact of ERCOT February Extreme Weather Event

DATE: March 10, 2021



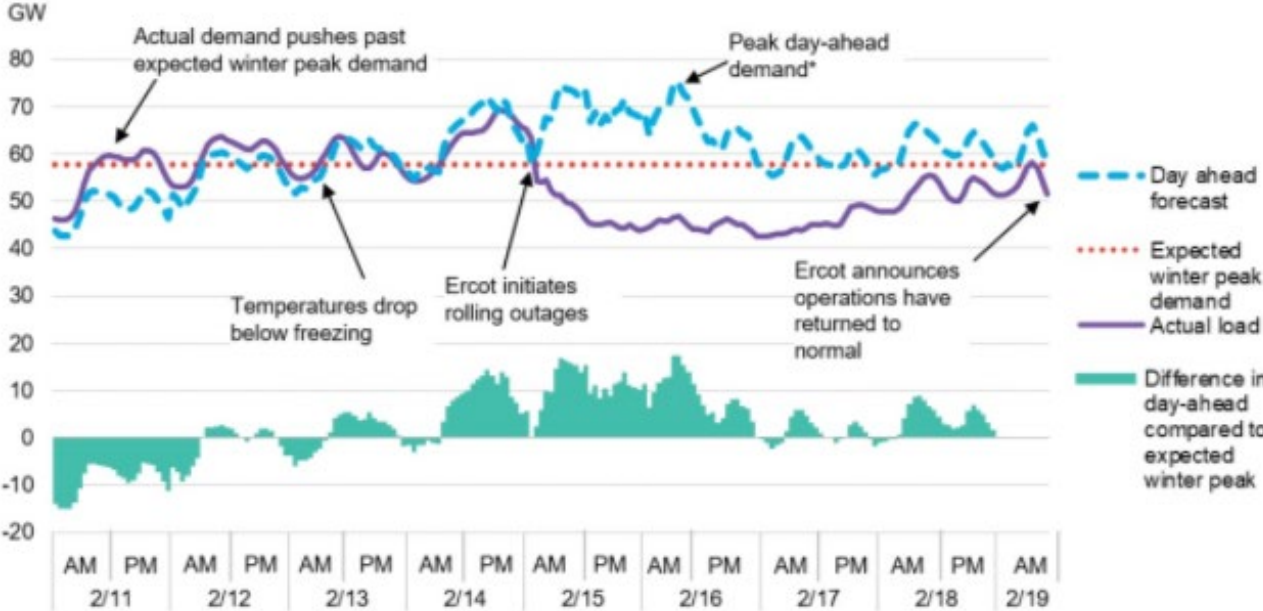
# ERCOT Extreme Weather & Outages

## February 14 – 19, 2021

- Peak Demand: 69,400 MW; forecast to hit 75,000 MW (unrealized due to load shed); 30% greater than expected winter peak
- Peak Load Shed: 16,500 MW
- Peak Outages: 48,000 MW at 9am, February 16 (40% of supply)
- Peak Prices: \$9,000/MWh (market cap) for more than 80 consecutive hours
- Power sales for the week: \$50 billion (February 2020 total: \$1 billion)

Resource Type	Capacity Offline (MW)	Total Installed Capacity (MW)	Reason / Notes
Thermal Generation (primarily natural gas)	25,000 – 30,000	70,000	Frozen gas wells and pipelines
Wind	~6,000	18,000	Improper winterization (lack of de-icing equipment)

# ERCOT Demand Forecasts – February, 2021



Source: Ercot, BloombergNEF

# ERCOT Real-Time Demand, Outages & North hub prices

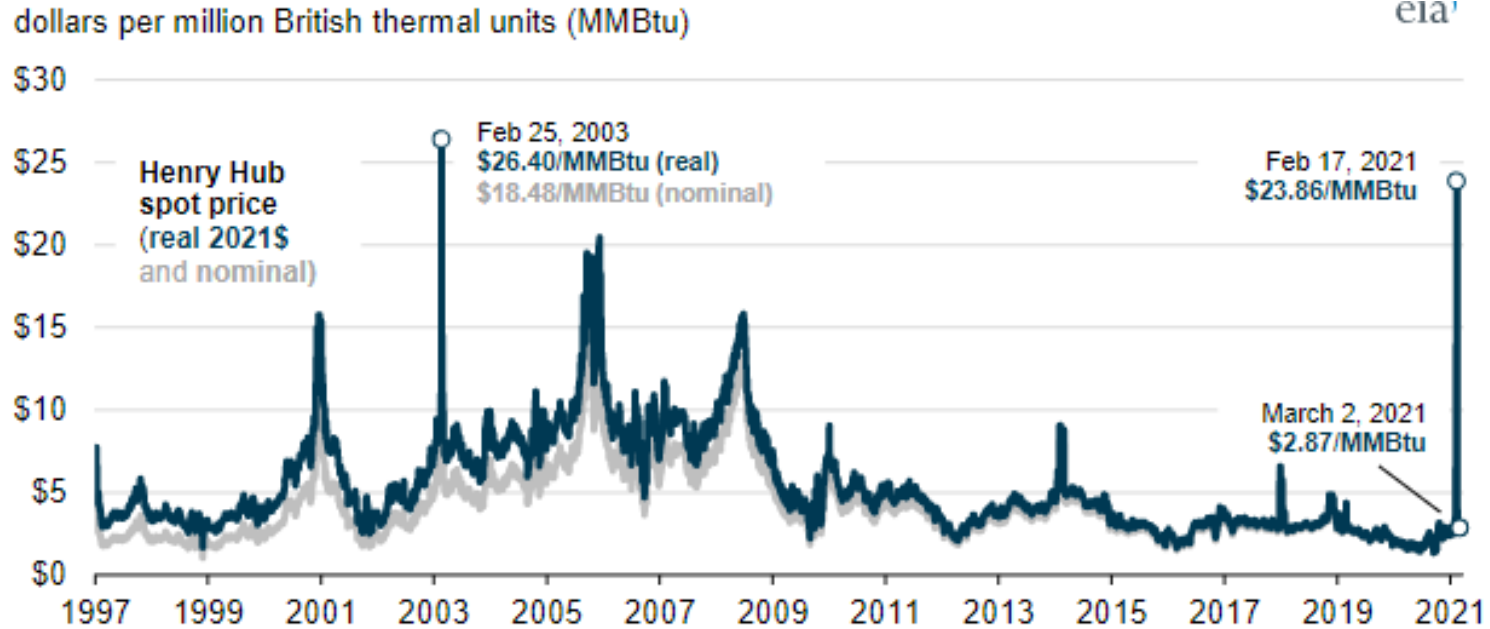


Source: BloombergNEF, Ercot

# Daily Henry Hub Natural Gas Spot Prices

Jan 1997 – Mar 2021

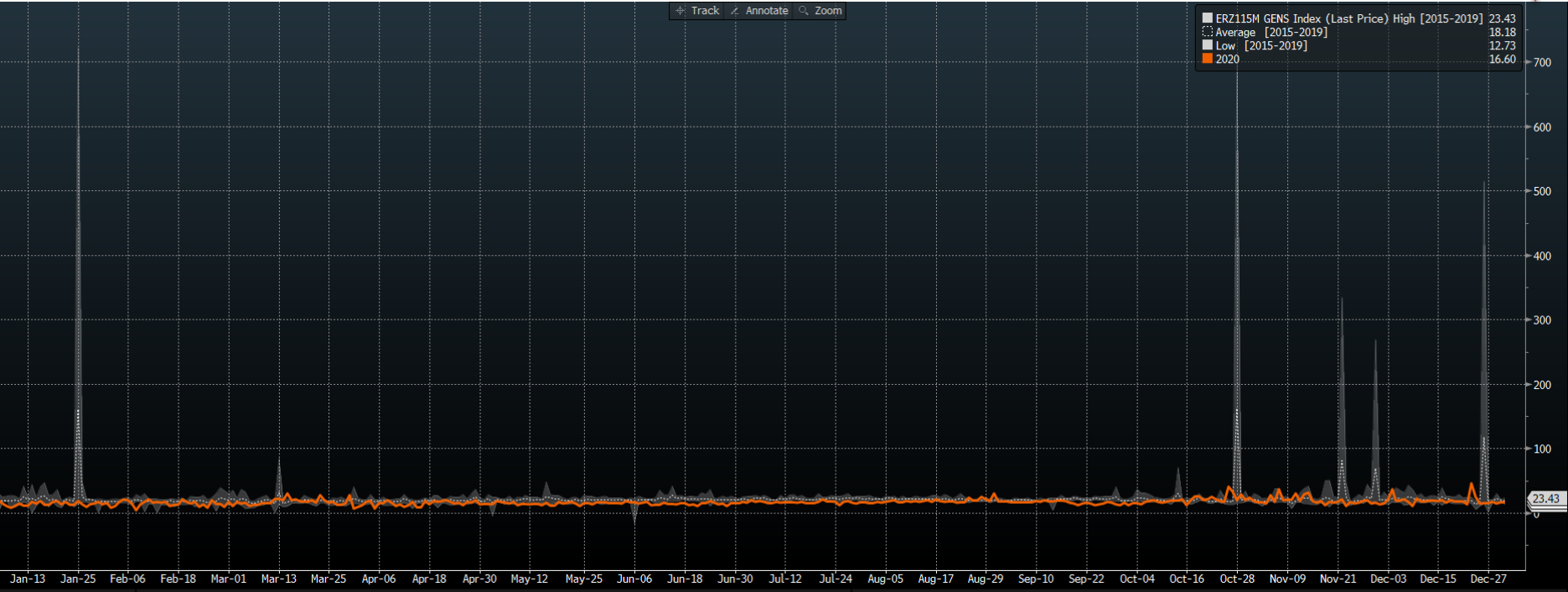
eia'



Source: U.S. Energy Information Administration, [Henry Hub natural gas spot price](#)

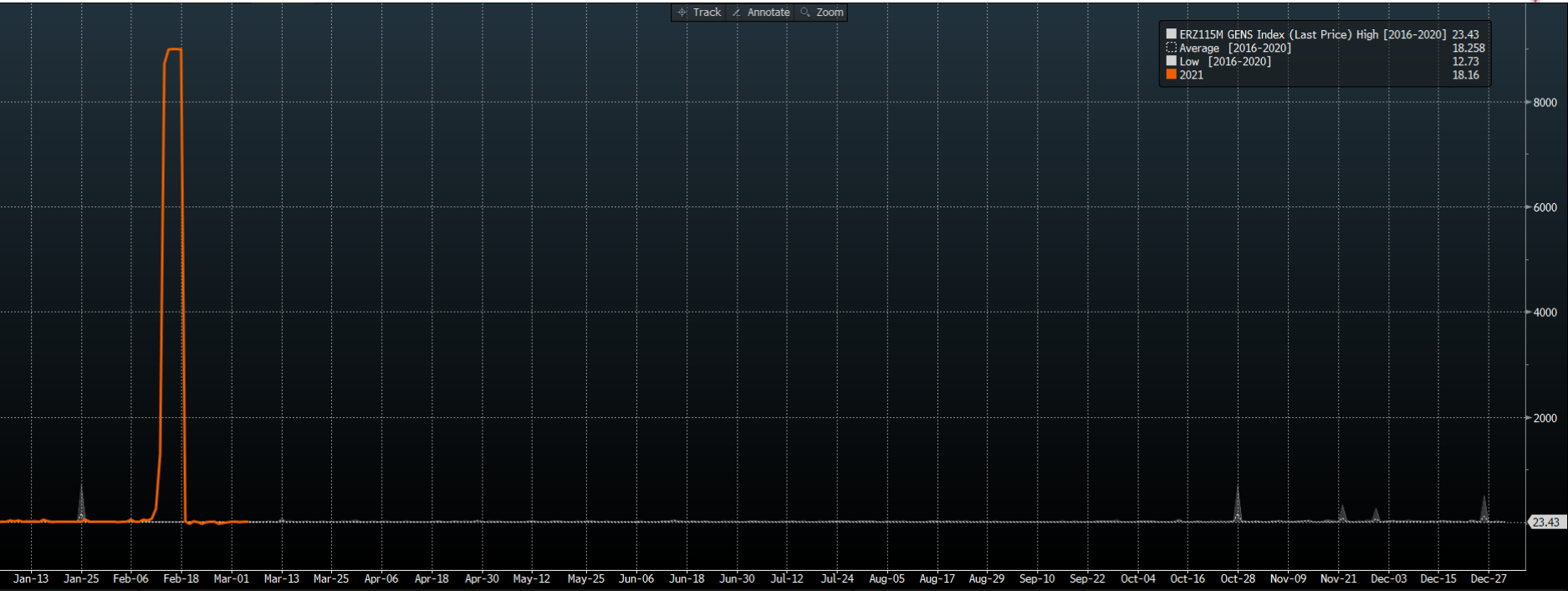
# ERCOT 24 Hour average real-time prices

Jan, 2020 – Dec 27, 2020



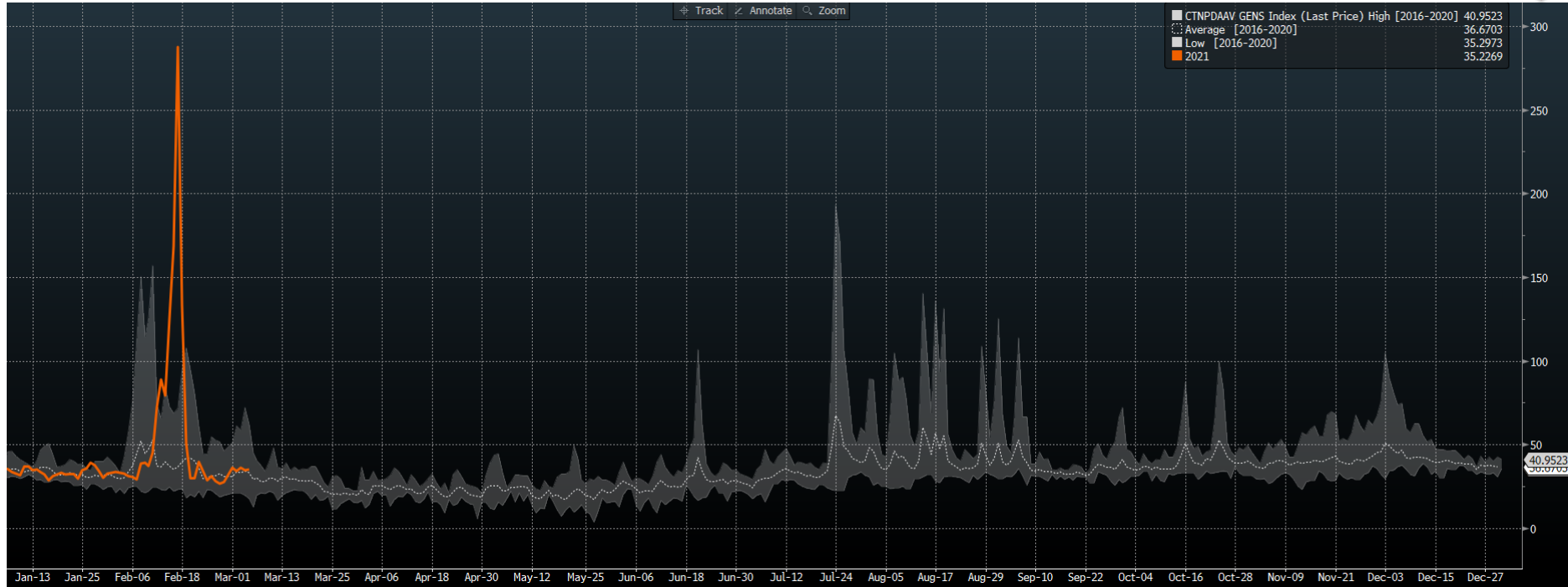
# ERCOT 24 Hour average real-time prices

Jan 2021 – Dec 27, 2021



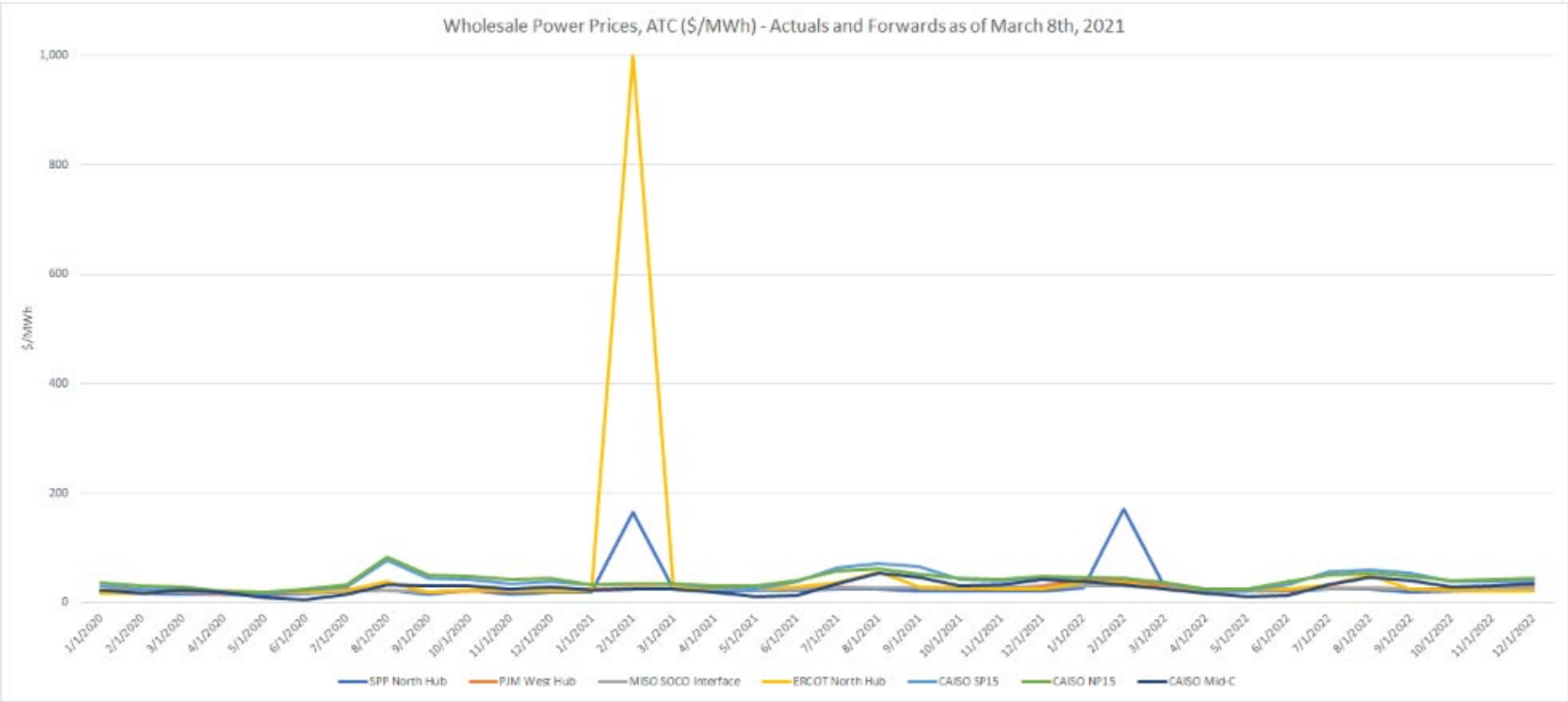
# NP-15 24 Hour average real-time prices

Jan 2021 – Dec 27, 2021



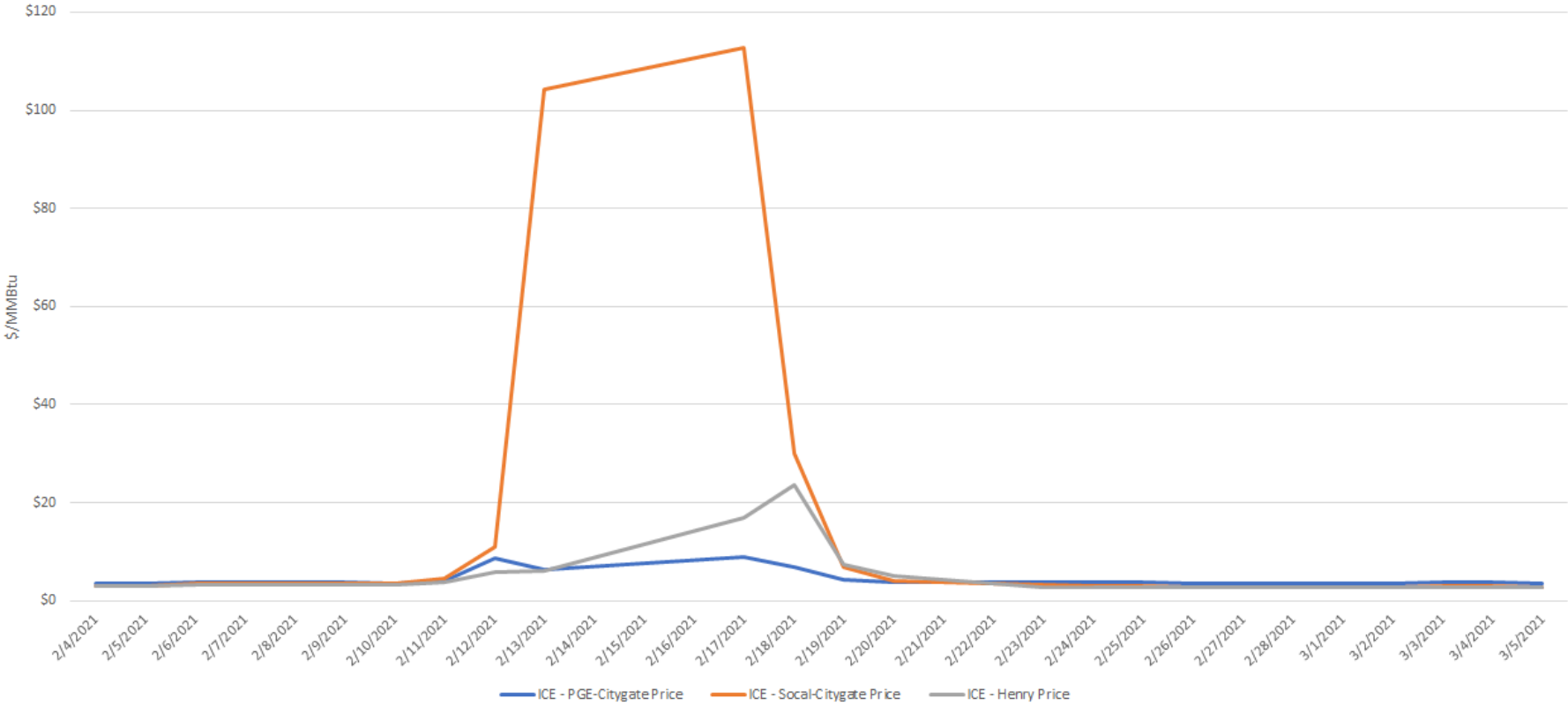


# Wholesale Power Prices – Around the Clock



# Natural Gas Hub Prices

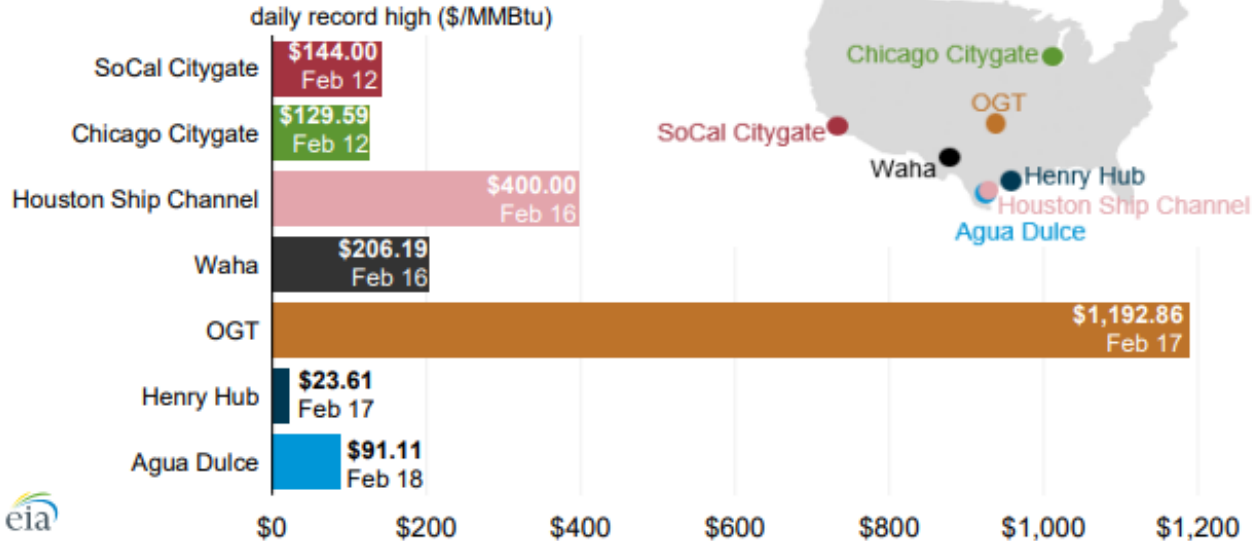
PG&E CityGate vs SoCal Border vs Henry Hub (\$/MMBtu)



# Natural Gas Hub Prices

## Natural gas price ranges at selected trading hubs (Feb 2021)

dollars per million British thermal units



Source: U.S. Energy Information Administration, based on *Natural Gas Intelligence* data

Many regional natural gas trading hubs also reached very high spot prices. In mid-February, 105 of the 178 natural gas pricing points reached recent high prices, according to Natural Gas Intelligence (NGI) data. High prices predominately occurred in the South, Southwest, and Midwest regions of the United States.

