



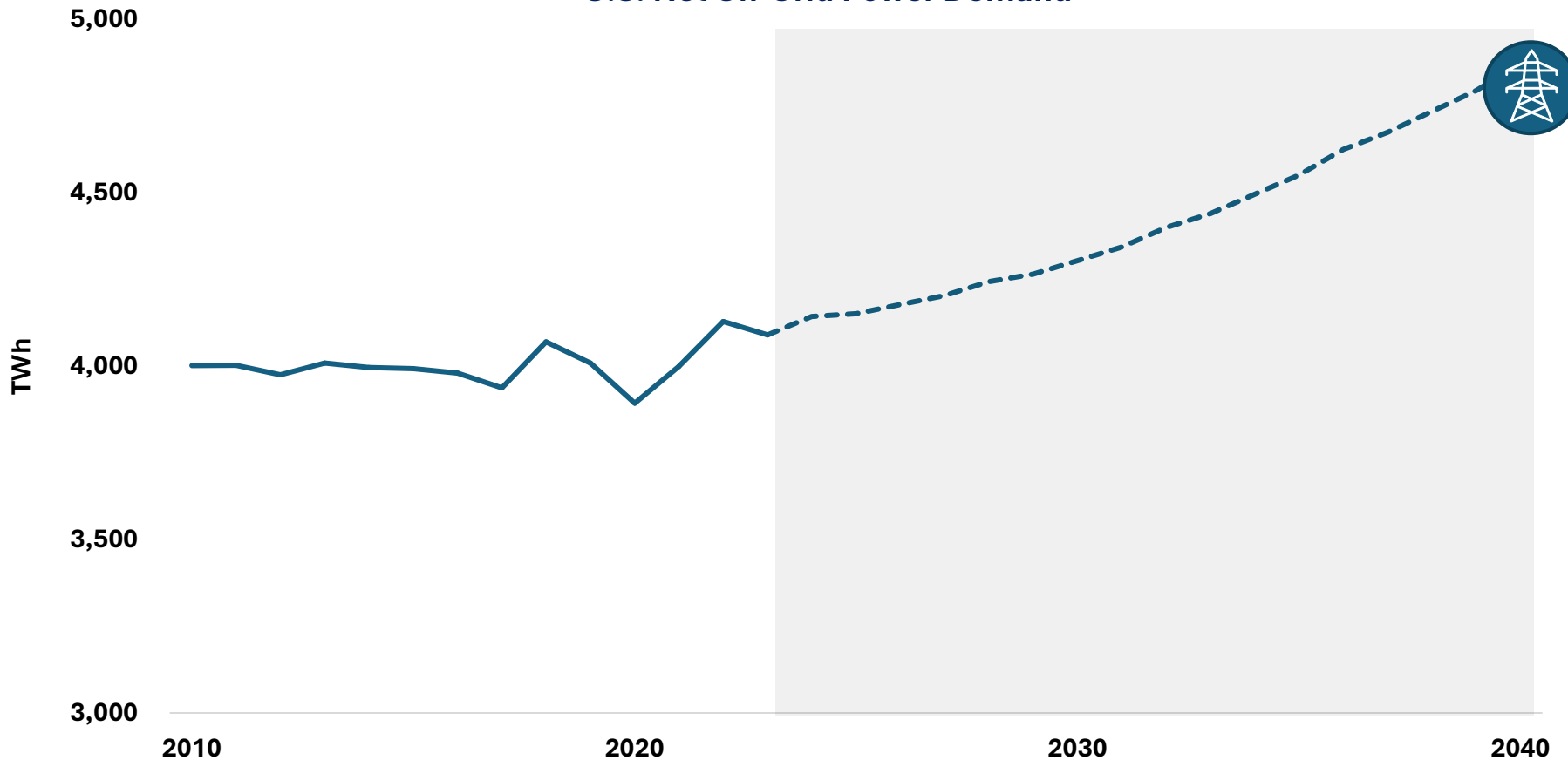
WE MAKE CLEAN ENERGY HAPPEN®

# The need for reliability

# Growing electricity demand requires additional backup generation

Electrification of heating and transport, data centers and AI-driven future will create growth in power demand not seen in past two decades

U.S. Net On-Grid Power Demand



Electricity demand experiencing

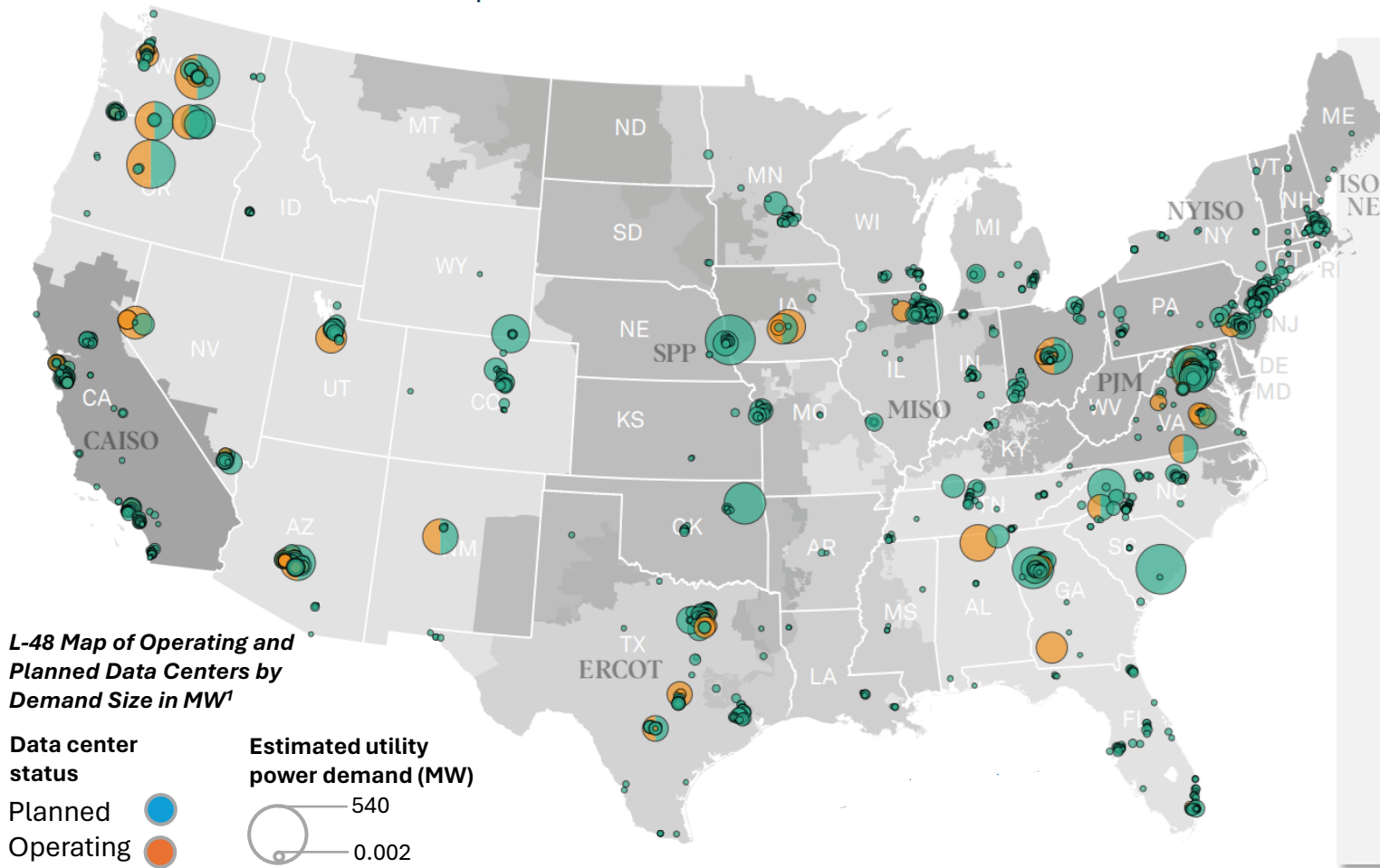
**▲ 3x**

faster growth per year

*this decade vs. prior decade driven by EV growth and emergence of large load data centers*

# AI is expected to drive more power demand from data centers

*Data centers will drive strong regional growth in baseload and peak power demand as they tend to operate around-the-clock, a tailwind for natural gas and renewables demand*



**Power demand needs from US data centers are projected to approach 46 GW by 2030,**

**2.3x**

**higher than in 2023<sup>2</sup>, requiring as much as**

**4 Bcf/d**

**of incremental natural gas demand<sup>3</sup>**

Sources: <sup>1</sup>As of Oct. 1, 2023. Power demand is based on total uninterruptible power supply data where known. If only net uninterruptible power supply power is known, figure was multiplied by 1.5 to account for estimated additional cooling power. If datacenter power supply was not available, it was estimated from total square footage. Data centers without square footage or power consumption figures were omitted from the analysis. Map image credit: Ciaralou Agpalo Palicpic. <sup>2</sup>Data center forecast is S&P Global Commodity Insights © 2024. <sup>3</sup>Williams Market Intelligence assumes all incremental demand US power demand from data centers is met by natural gas

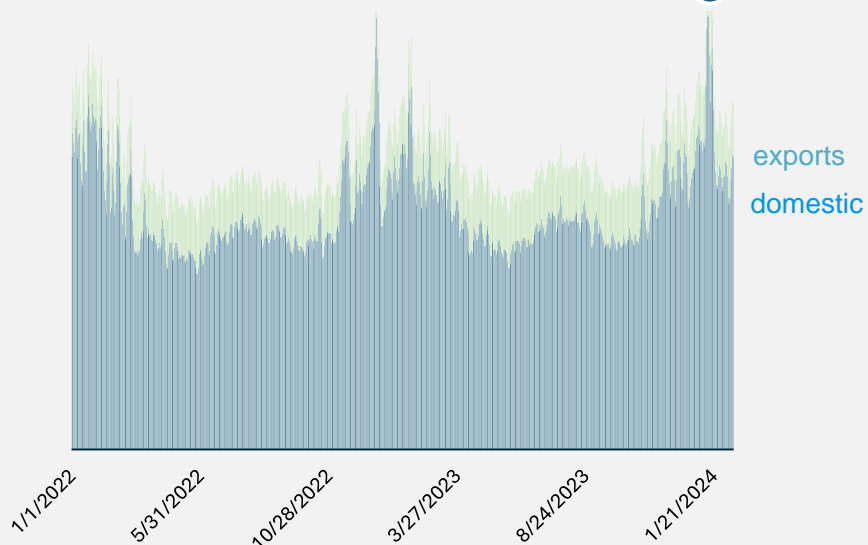
# Natural gas pipeline capacity required to handle peak volume demand

## U.S. Daily Natural Gas Volume Demand

In MMcf/d



Gas infrastructure plans consider *peak volumes, not averages*



### Gas pipeline capacity required for peak demand needs

Natural gas infrastructure providers and customers must plan for increasing **peak demand needs** for those extreme weather days or seasonal demand peaks rather than for lower annual average volumes

**Peak natural gas demand is increasing** due to AI- and EV-driven electricity demand growth, increasing intermittent renewables capacity and strong LNG export demand which tend to increase the variability and peaks for natural gas demand

# US power demand expectations are repeatedly underestimated by forecasters

The need for reliability

**Our natural gas pipeline contracted capacity is critical to ensure electric grid reliability on peak days**



## Growing demand for natural gas

Annual demand for natural gas has steadily grown  
~4% CAGR since 2015



## Setting new peak day records

Hit record day demand for natural gas in July 2023 of  
53 Bcf/d

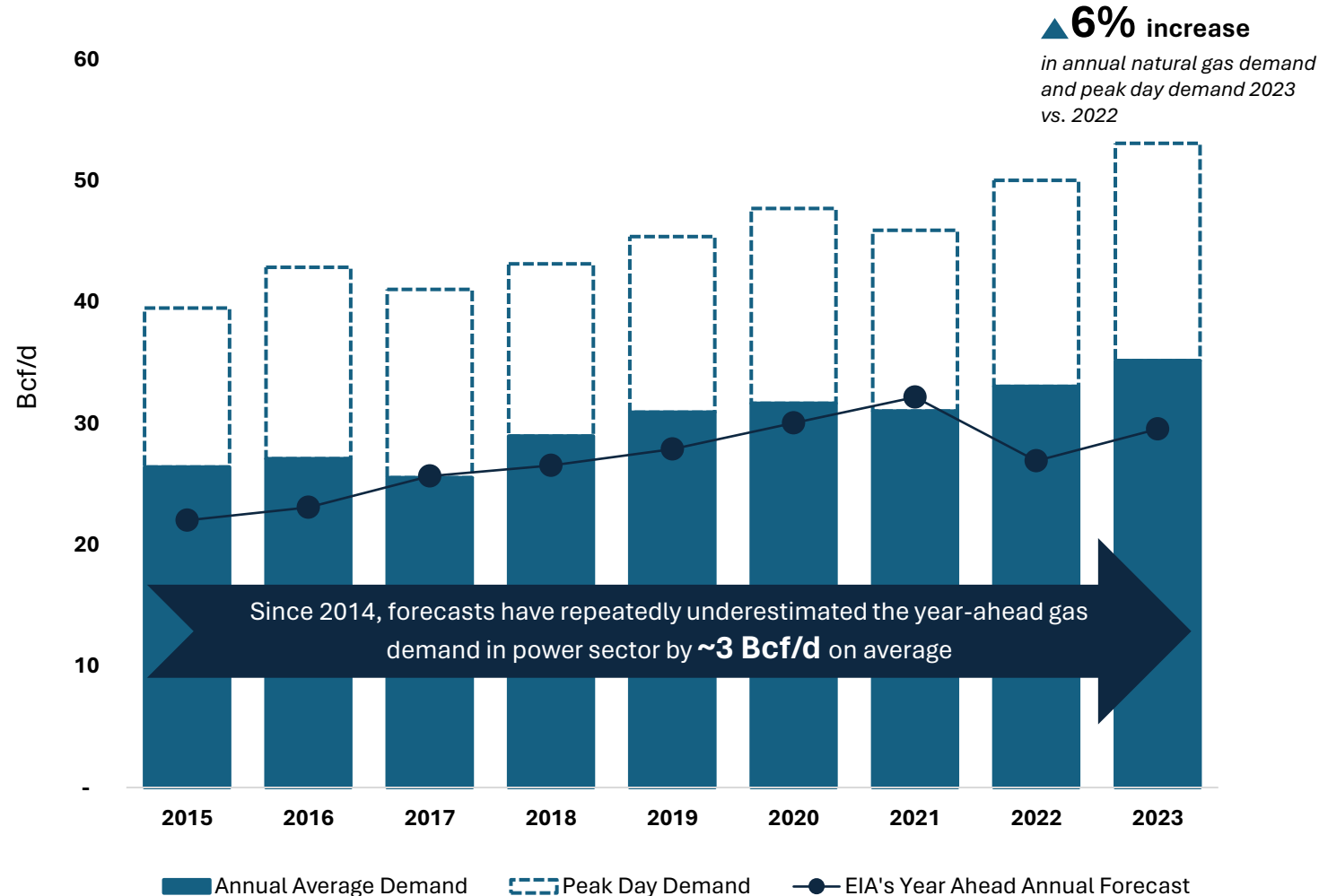


## Forecasters underestimating the need for gas

Year ahead forecasts historically underestimate gas demand and  
dramatically missed 2022 annual demand by 24%

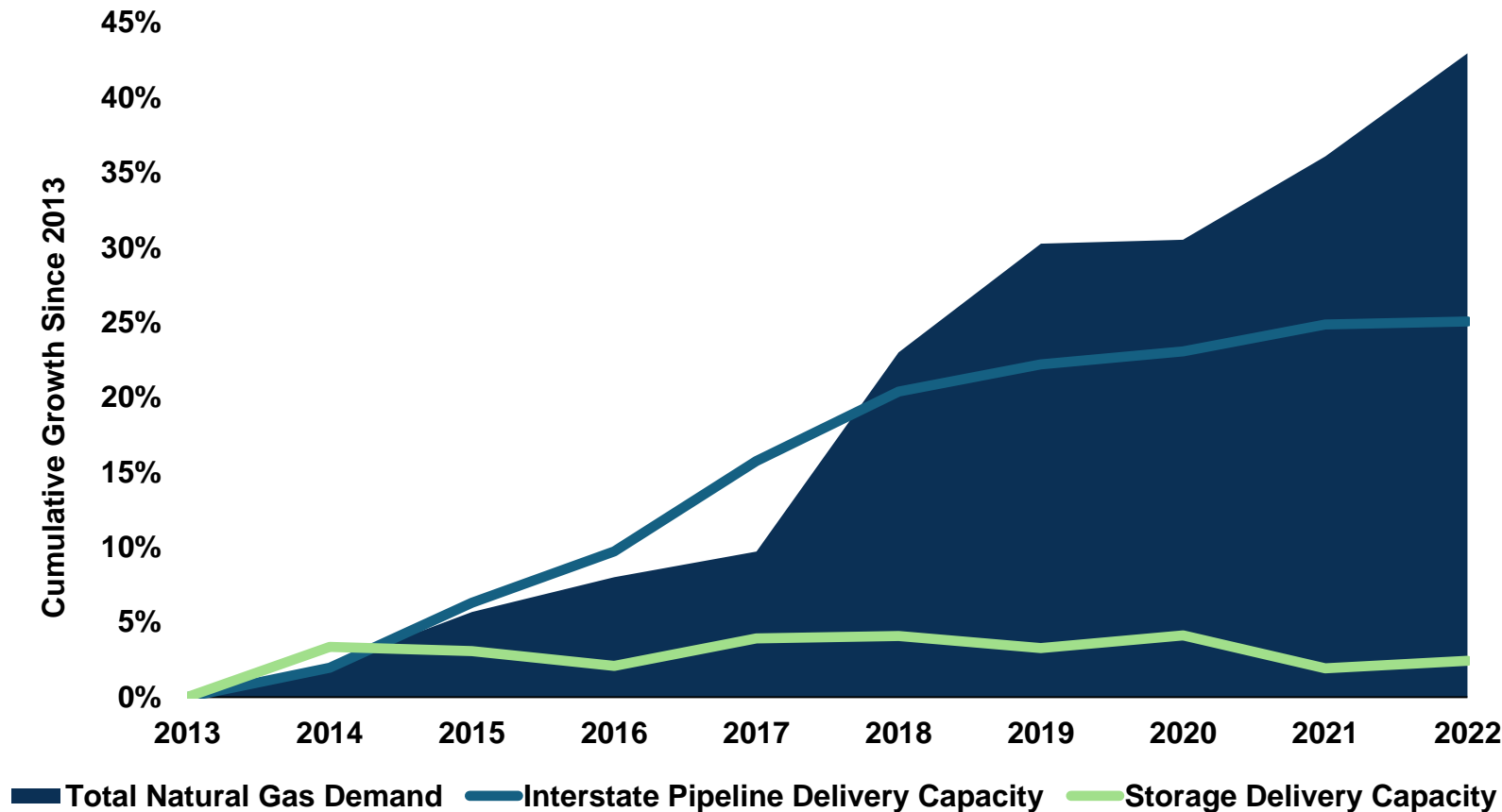
**Accurate planning is vital to ensure sufficient transmission will be available when and where it is needed.**

## US Natural Gas Demand for Power



# There is a growing need for reliable infrastructure investment

Cumulative Percentage Growth in L-48 Natural Gas Demand versus Growth in Interstate Natural Gas Pipeline Capacity and Natural Gas Storage Delivery, 2013-2022



Since 2013 demand for gas has grown by **▲ 43%** while infrastructure to deliver gas has increased by **▲ 25%** and storage delivery capacity has grown only **▲ 2%**

# Natural gas meets the trifecta for energy solutions

**CLEAN**

**45%**

less carbon dioxide emissions than coal<sup>1</sup>

U.S. CO<sub>2</sub> emissions decline with increased coal-to-natural gas switching in the power sector

**RELIABLE**

**3.5x**

more reliable than renewables as assigned by power grid regulators<sup>2</sup>

Natural gas is a flexible and dispatchable energy source, making it ideal for the power sector

**AFFORDABLE**

**4x**

cheaper than electricity<sup>3</sup>

Natural gas remains the cheapest fuel for residential consumers