



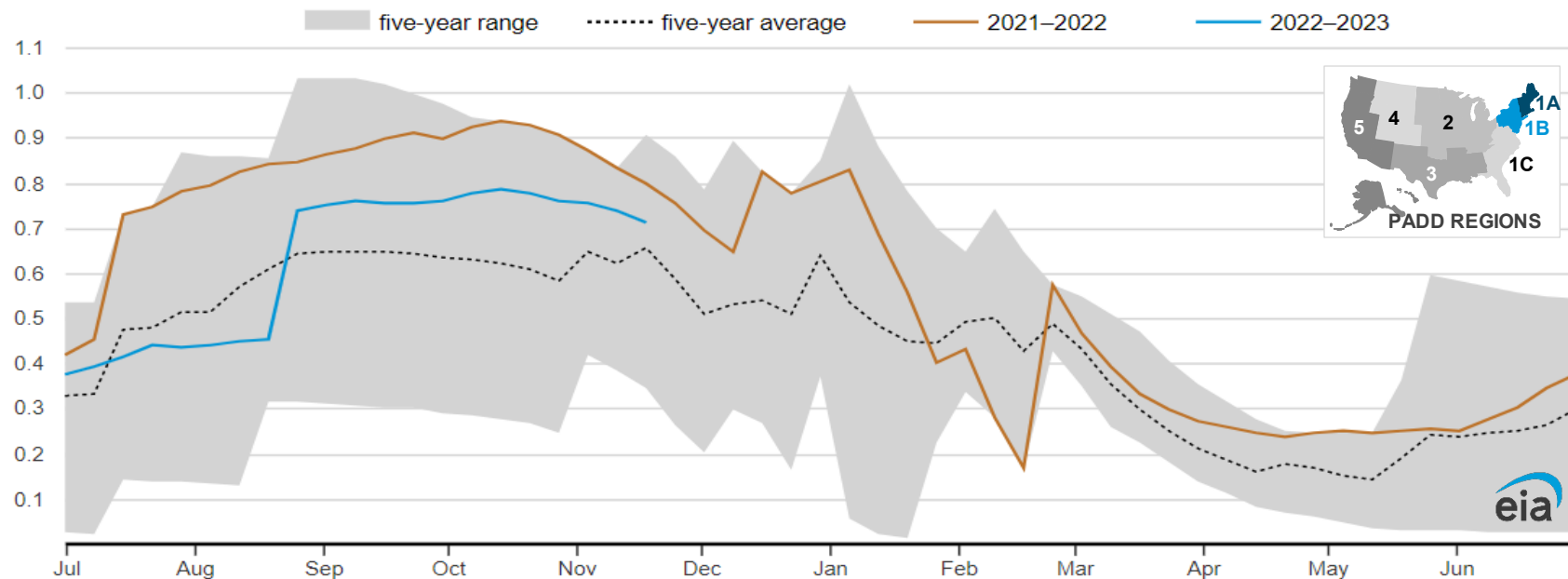
2022/23 Winter Propane Market Update

November 23, 2022 | Washington, DC

(Inventory data as of 11/18/22; residential heating fuel prices as of 11/21/22)

PADD 1A (New England) propane inventories above the 5-year average

New England (PADD 1A) ending stocks of propane and propylene
million barrels



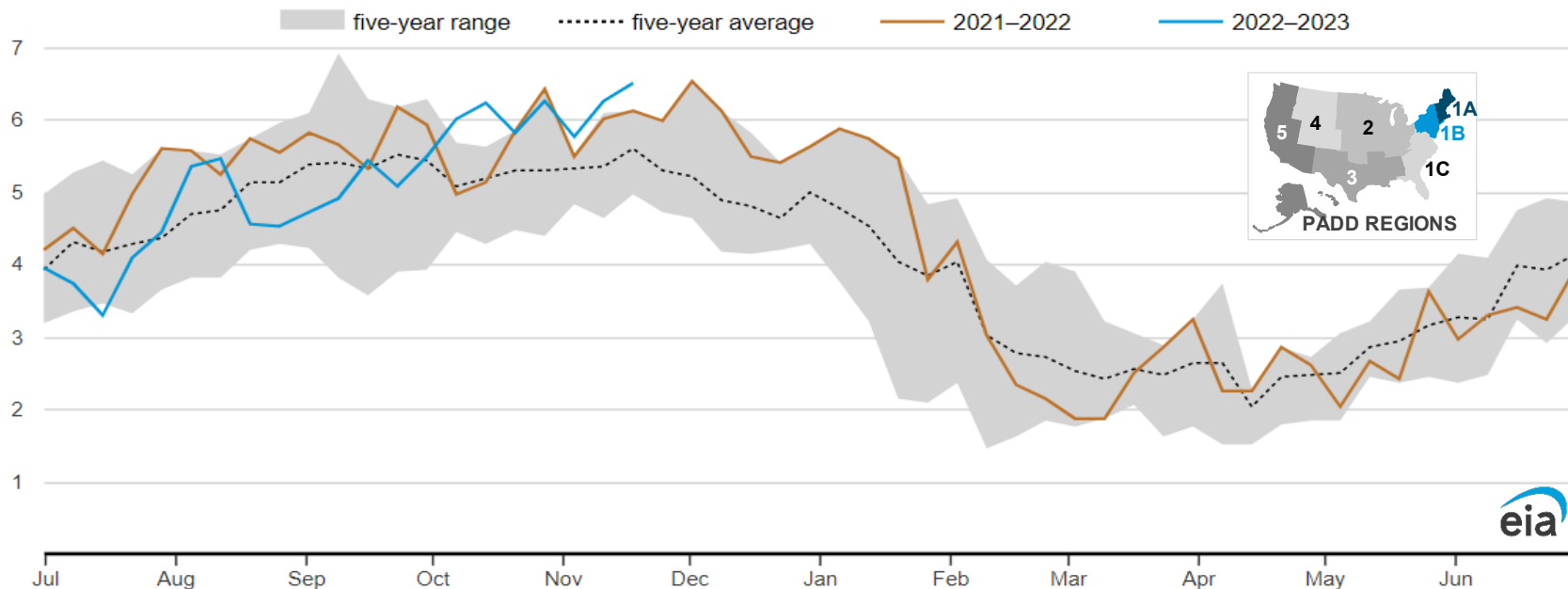
Source: U.S. Energy Information Administration, *Weekly Petroleum Status Report*, November 23, 2022

Note: PADD 1A is composed of Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont.

data through November 18, 2022

PADD 1B (Mid-Atlantic) propane inventories above the 5-year range

Central Atlantic (PADD 1B) ending stocks of propane and propylene
million barrels



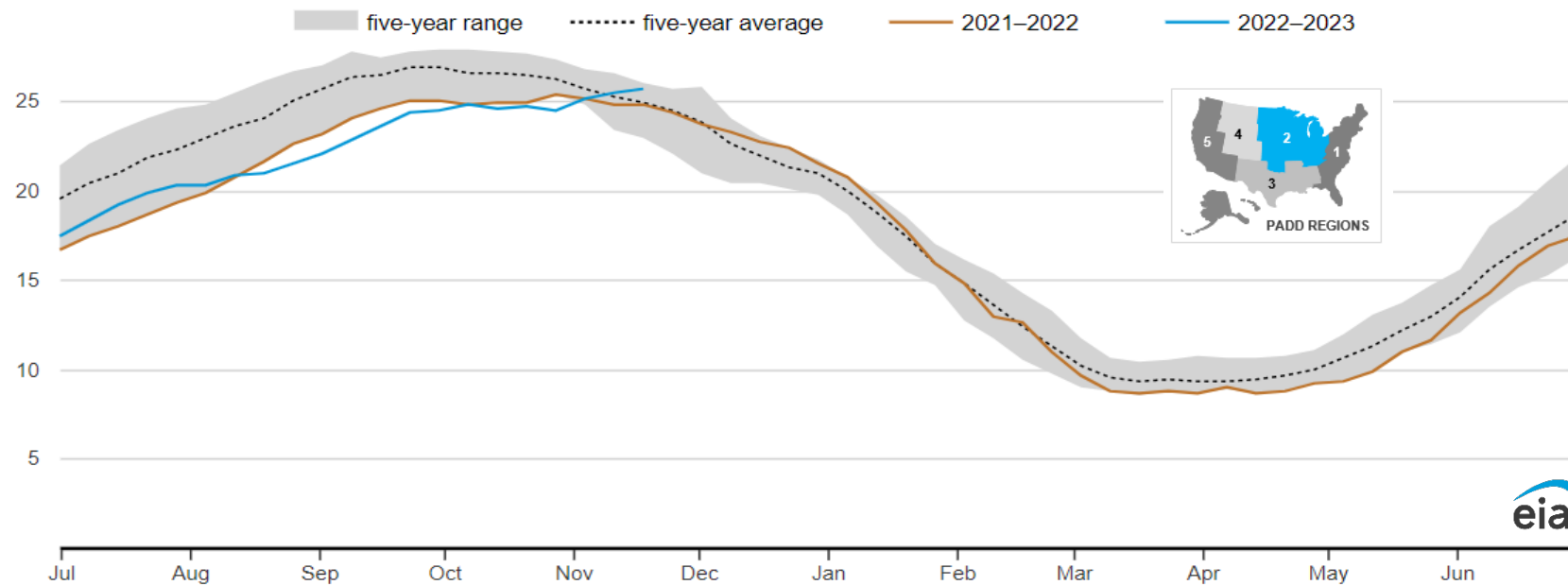
Source: U.S. Energy Information Administration, *Weekly Petroleum Status Report*, November 23, 2022

Note: PADD 1B is composed of Delaware, District of Columbia, Maryland, New Jersey, New York, and Pennsylvania.

data through November 18, 2022

PADD 2 (Midwest) propane inventories above the 5-year average

Midwest (PADD 2) ending stocks of propane and propylene
million barrels



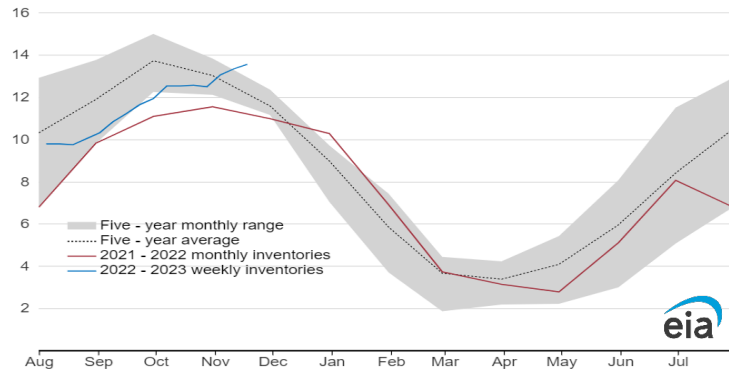
Source: U.S. Energy Information Administration, *Weekly Petroleum Status Report*, November 23, 2022

Note: PADD 2 is composed of Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, Oklahoma, South Dakota, Tennessee, and Wisconsin.

data through November 18, 2022

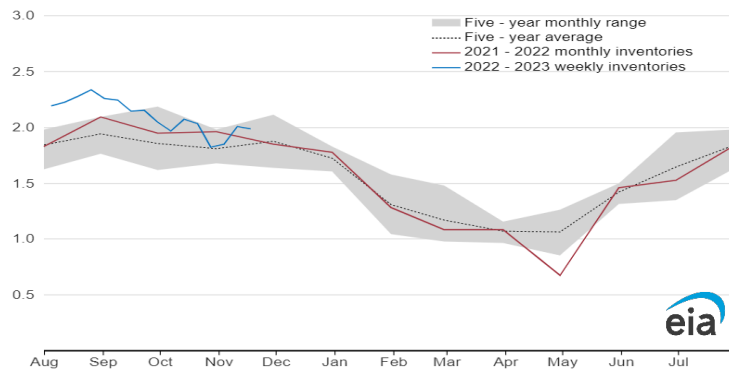
Selected state propane* inventories

Kansas propane/propylene stock at refineries, terminals, and natural gas plants (not pipelines)
million barrels



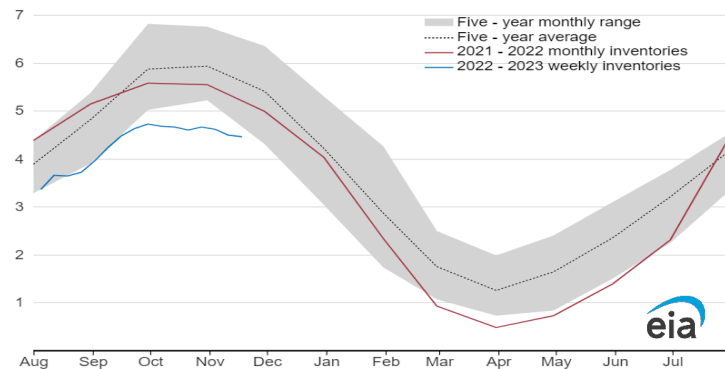
Source: U.S. Energy Information Administration, *Petroleum Supply Monthly and Weekly Petroleum Status Report*

Illinois, Indiana, Ohio propane/propylene stock at refineries, terminals, and natural gas plants (not pipelines)
million barrels



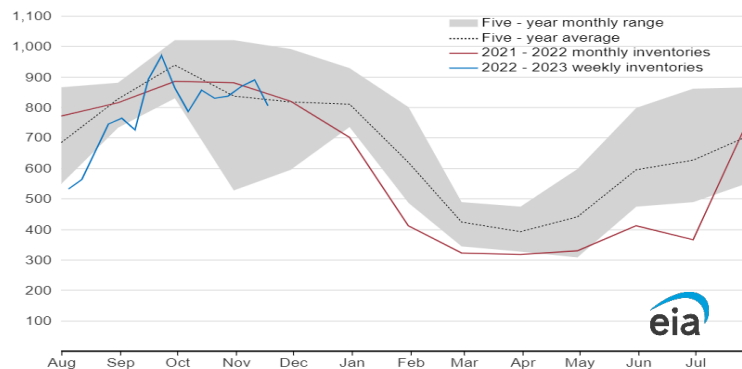
Source: U.S. Energy Information Administration, *Petroleum Supply Monthly and Weekly Petroleum Status Report*

Michigan propane/propylene stock at refineries, terminals, and natural gas plants (not pipelines)
million barrels



Source: U.S. Energy Information Administration, *Petroleum Supply Monthly and Weekly Petroleum Status Report*

Iowa, Minnesota, Wisconsin propane/propylene stock at refineries, terminals, and natural gas plants (not pipelines)
thousand barrels



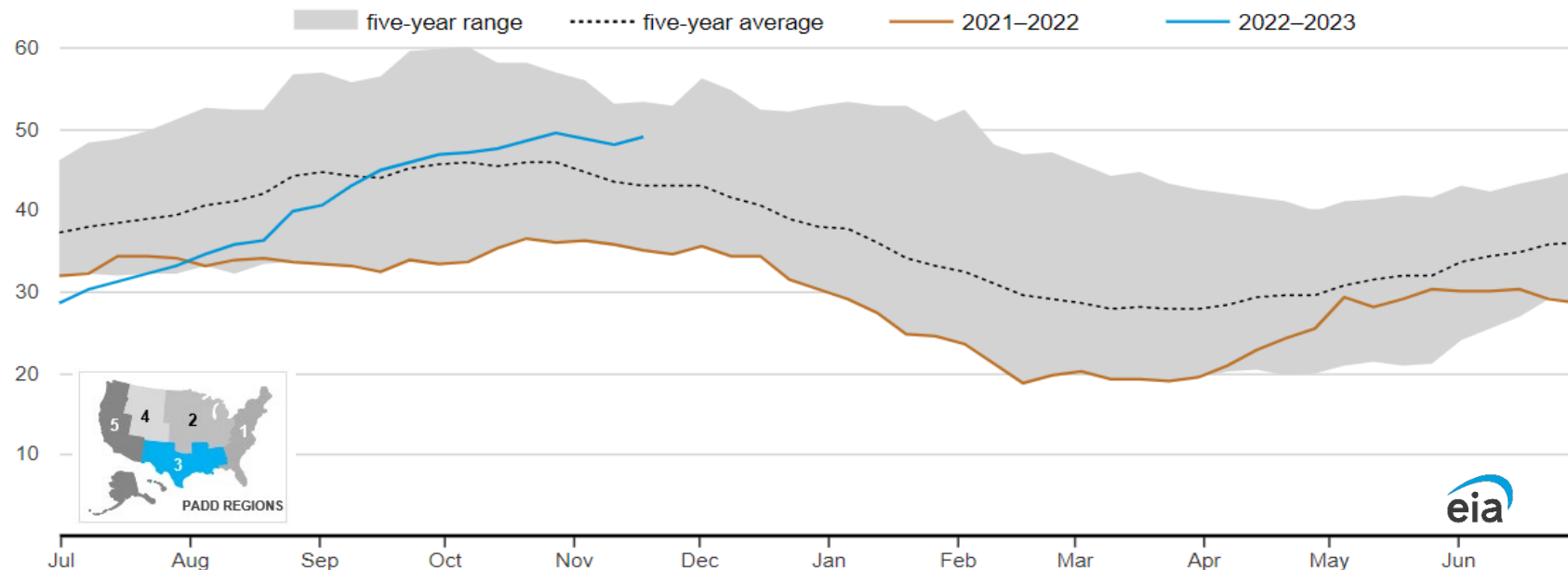
Source: U.S. Energy Information Administration, *Petroleum Supply Monthly and Weekly Petroleum Status Report*

Data source: EIA, *Weekly Petroleum Status Report*, data through November 18, 2022

*propane/propylene for fuel use only

PADD 3 (Gulf Coast) propane inventories above the 5-year average

Gulf Coast (PADD 3) propane/propylene inventories
million barrels



Source: U.S. Energy Information Administration, *Weekly Petroleum Status Report*, November 23, 2022

Note: PADD 3 is composed of Alabama, Arkansas, Louisiana, Mississippi, New Mexico, and Texas.

data through November 18, 2022

Conway, KS propane spot prices now at a ~3¢/gal premium to Mt. Belvieu, TX

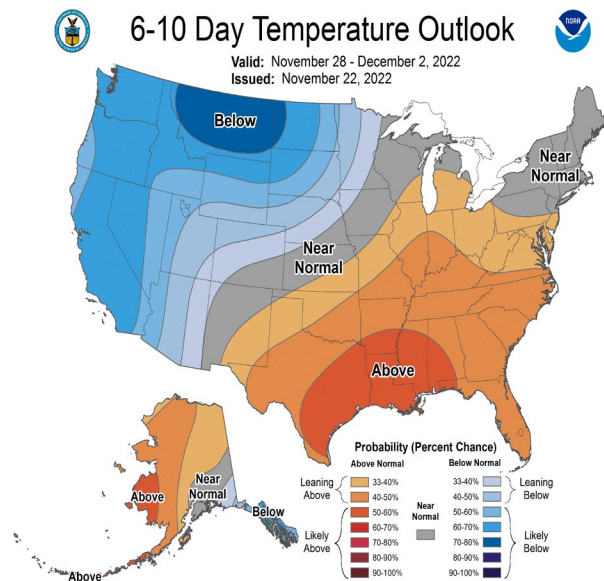
Propane spot prices (Conway, KS and Mont Belvieu, TX)
dollars per gallon



Data source: Bloomberg, L.P. data through November 22, 2022

NOAA's projected temperatures:

November 28 – Dec. 2, 2022, and November 30 – Dec. 6, 2022



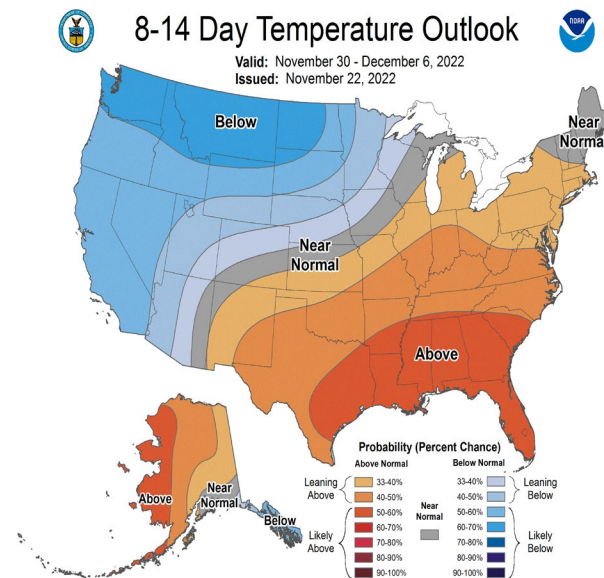
A = temperatures above normal

N = equal chance that temperatures are above normal, normal, or below normal

B = temperatures below normal

Data source: [NOAA](https://www.noaa.gov), Nov. 22, 2022

Petroleum Administration for Defense Districts (PADDs)

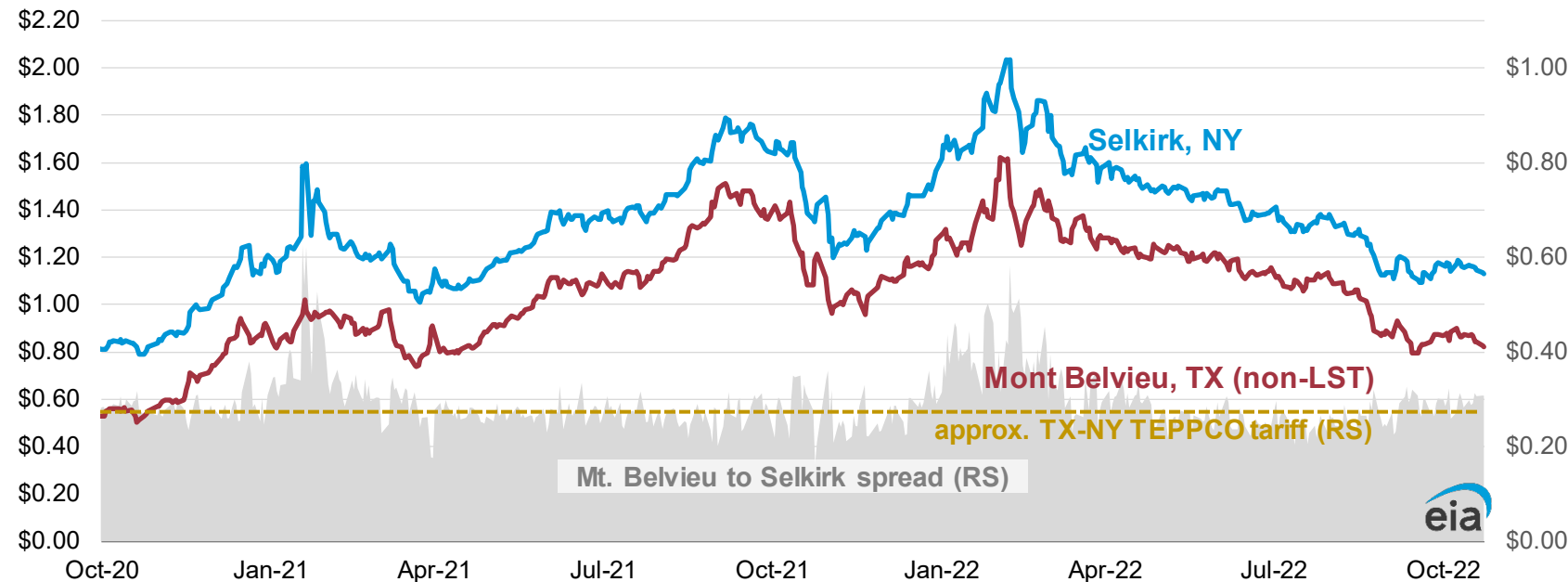


- NOAA forecasts a chance of below-normal temperatures from the Pacific Coast to the northern Great Plains, with the highest probability in the upper-Rockies. There is a chance of above-normal temperatures from the Mid-Atlantic to parts of the Great Lakes, stretching to the Southwest. Later in the forecast, above-normal temperatures are expected to move slightly Northeast, encompassing the eastern Great Lakes.
- The cooler-than normal forecast across PADDs 4 and 5 are likely to result in above average propane demand for this time of year. The warmer-than-normal forecast in PADDs 1, 2, and 3 may decrease demand relative to this time of year.

Northeast propane prices, generally dictated by tariff on TEPPCO* pipeline, currently high enough to pull product from the Gulf Coast

propane spot prices
dollars per gallon

propane price spread
dollars per gallon

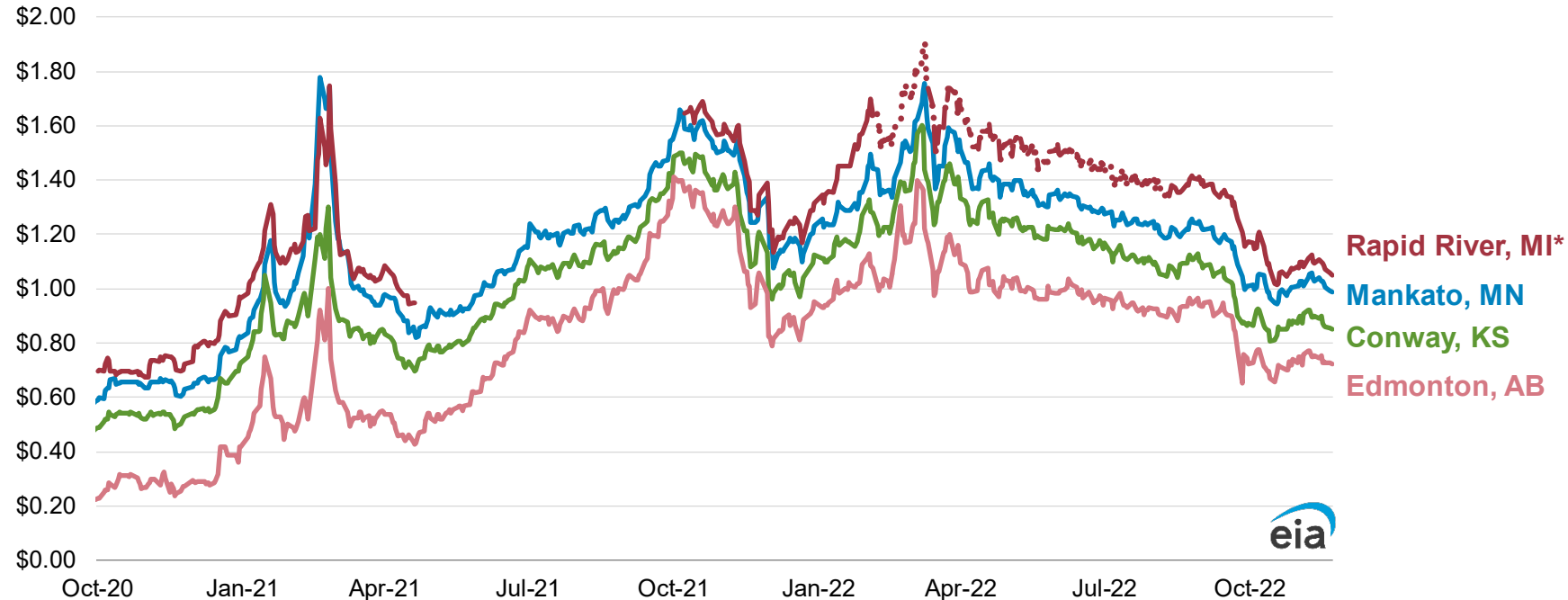


TEPPCO = Enterprise TE Products Pipeline Company LLC

Data source: Bloomberg, L.P., data through November 22, 2022; Enterprise Products Partners L.P., [Effective Tariffs](#), FERC No. 54.64.0

Prices at major Midwest market centers closely correlated with Conway, with Edmonton prices at similar discount to Conway as last winter

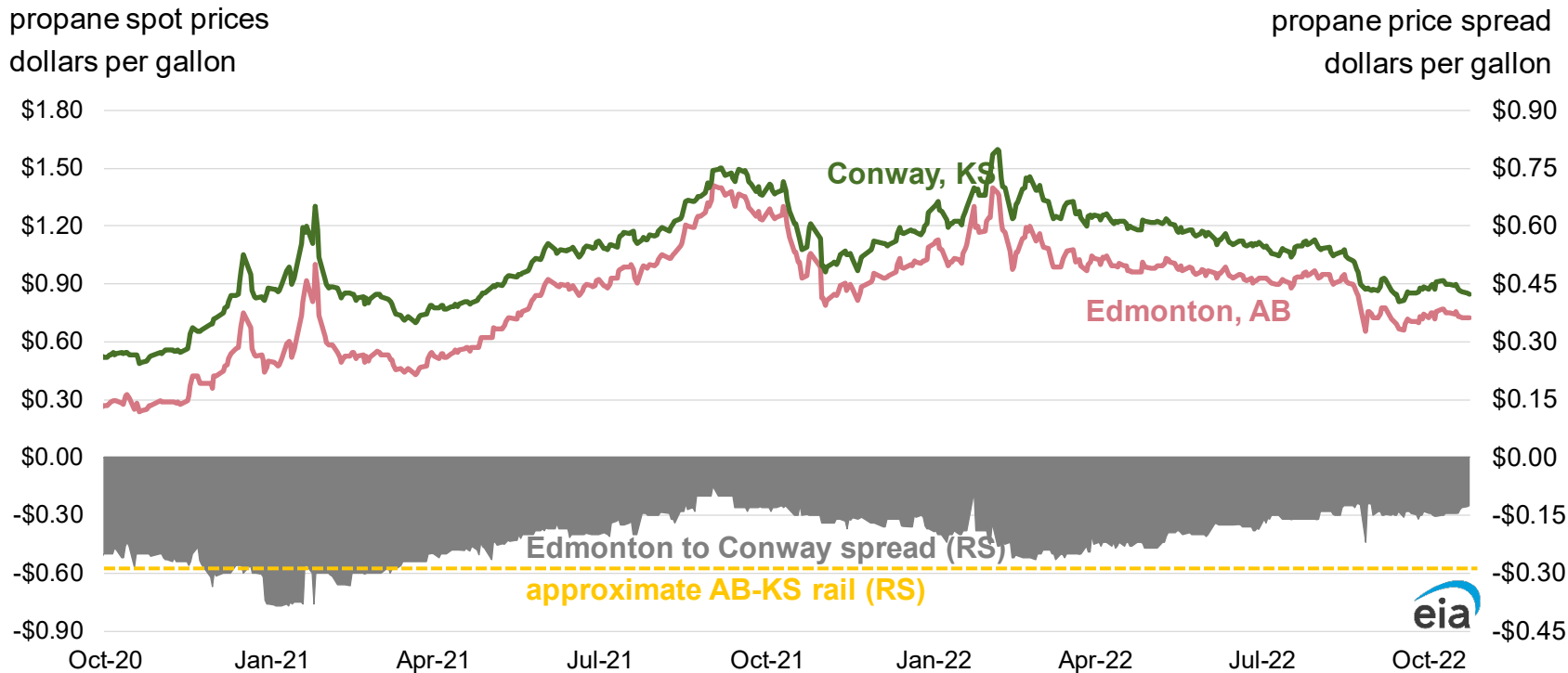
propane spot prices
dollars per gallon



Data Source: Bloomberg, L.P., data through November 22, 2022

*Rapid River, MI rack prices not consistently available during summer months

Discount for Edmonton propane relative to Conway, around ~13¢/gal, not enough to cover rail transportation costs into most Midwest markets



Data source: Bloomberg, L.P., data through November 22, 2022

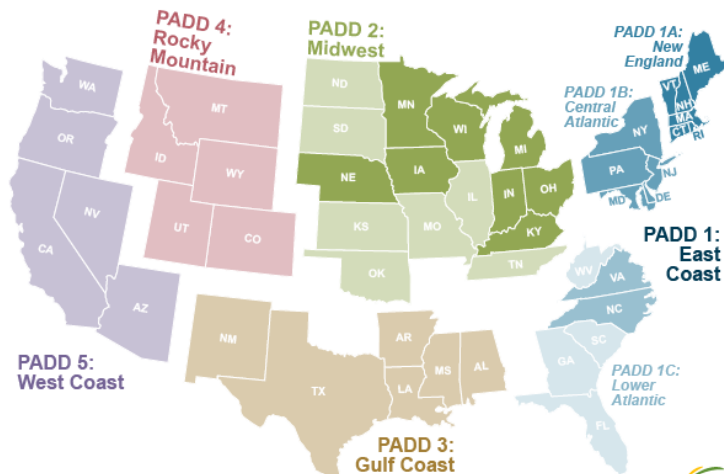
State Heating Oil and Propane Program (SHOPP) updates

- SHOPP is a collaborative program between states and EIA that provides weekly wholesale and retail prices for heating oil and propane at the state level.
- EIA expanded SHOPP in October 2014 to include 14 additional states in propane price data collection. In 2016, EIA added 10 new states to its wholesale propane price publication. This should be taken into consideration when comparing the average prices for the U.S., PADD 1, PADD 1B, PADD 1C, and PADD 2 averages.
- EIA has been providing more granular inventory data to states on a weekly basis since the 2016/2017 heating season.
- EIA implemented two new samples for residential heating oil and propane in October 2019. Under the new [sampling methodology](#), EIA is publishing [standard errors](#) for SHOPP prices.

Maps of states participating in Winter Fuels Survey

Petroleum Administration for Defense Districts

Winter Heating Fuels Survey — PADD 1 and 2 represented States



HEATING OIL



PADD 1: East Coast

PADD 1A: New England
Connecticut New Hampshire
Maine Rhode Island
Massachusetts Vermont

PADD 1B: Central Atlantic
Delaware New Jersey
District of Columbia New York
Maryland Pennsylvania

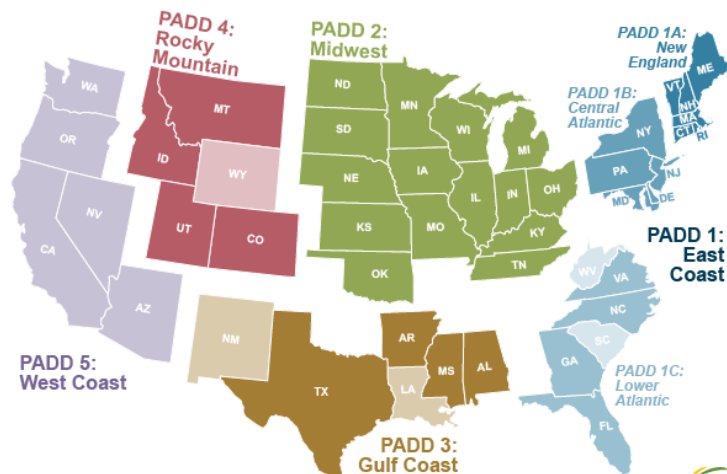
PADD 2: Midwest

Indiana Minnesota
Iowa Nebraska
Kentucky Ohio
Michigan Wisconsin

PADD 1C: Lower Atlantic
North Carolina Virginia

Petroleum Administration for Defense Districts

Winter Heating Fuels Survey — PADD 1, 2, 3, and 4 represented States



PROPANE



PADD 1: East Coast

PADD 1A: New England
Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont

PADD 1B: Central Atlantic
Delaware
Maryland
New Jersey
New York
Pennsylvania

PADD 1C: Lower Atlantic
Florida
Georgia
North Carolina
Virginia

PADD 2: Midwest

Illinois Nebraska
Indiana North Dakota
Iowa Ohio
Kansas Oklahoma
Kentucky South Dakota
Michigan Tennessee
Minnesota Wisconsin
Missouri

PADD 3: Gulf Coast

Alabama Mississippi
Arkansas Texas

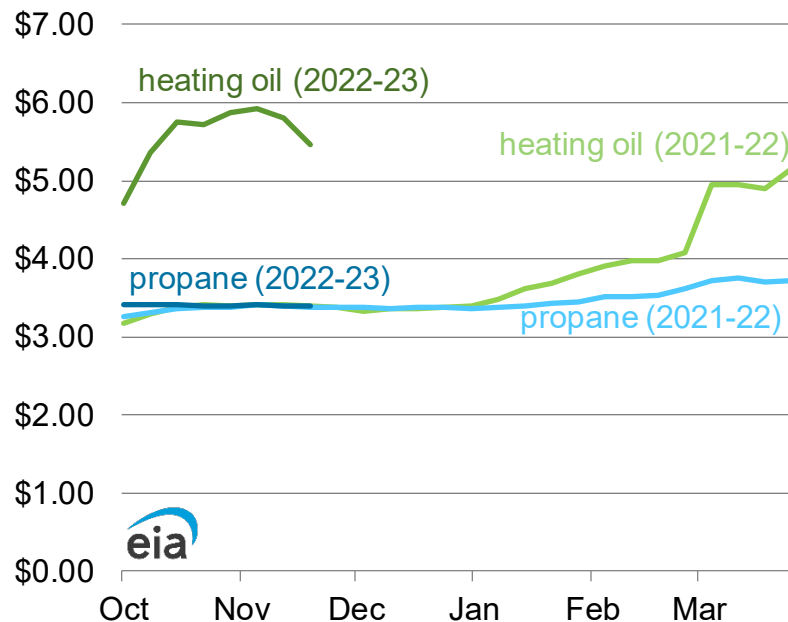
PADD 4: Rocky Mountain
Colorado Montana
Idaho Utah

Data source: EIA, [Heating Oil and Propane Update](#)

Retail propane prices in PADD 1 are at the same level compared to this time last year, while propane prices in PADD 2 are lower

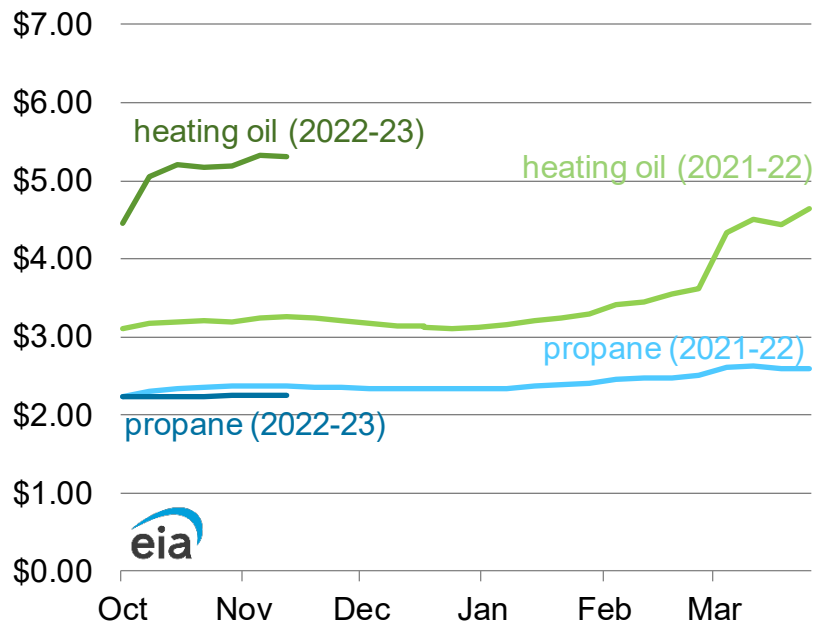
PADD 1

dollars per gallon



PADD 2

dollars per gallon

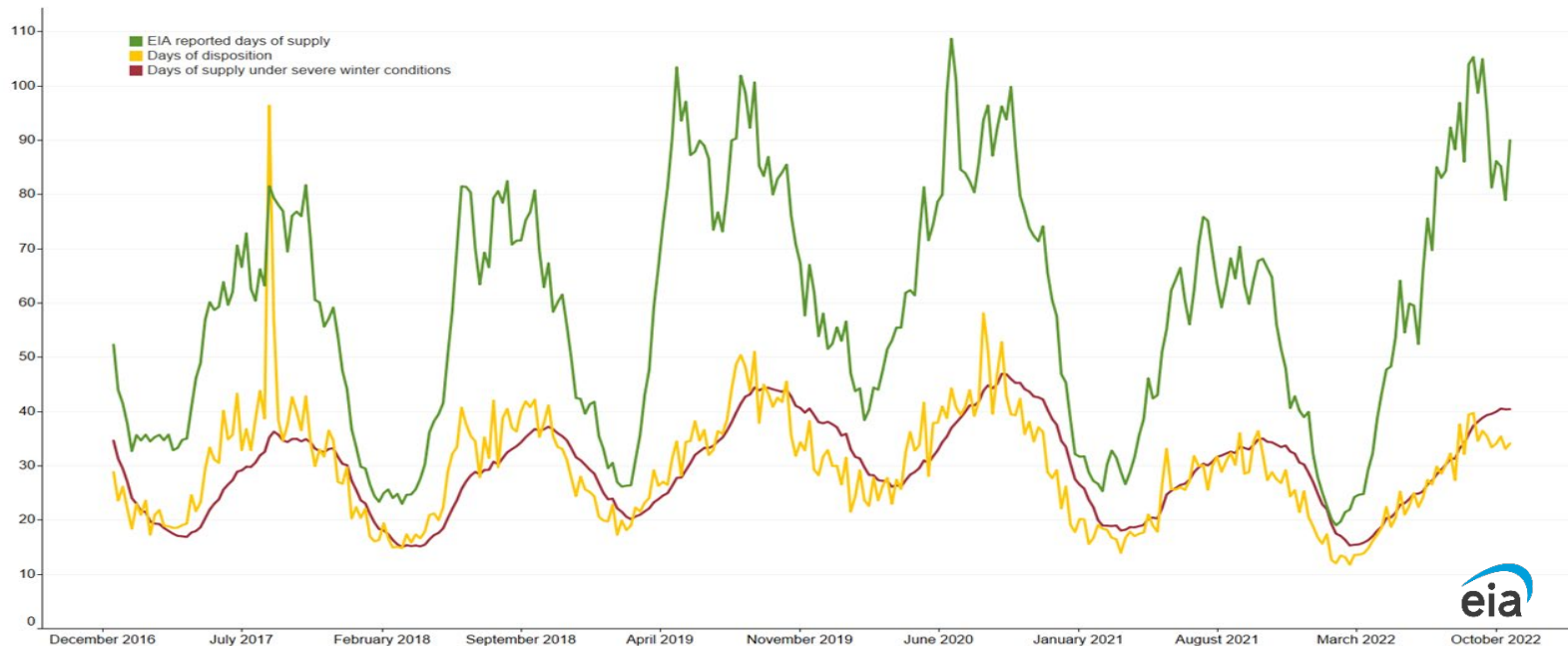


Data source: State Heating Oil and Propane Program, data through November 21, 2022

Various days-of supply/disposition measures

U.S. weekly stocks of propane/propylene

days of supply & disposition



Note: *disposition = domestic product supplied + exports

Data source: U.S. Energy Information Administration, Weekly Petroleum Status Report, data through November 11, 2022

For more information, please see EIA's [webinar on Propane Market Indicators and Measures of Supply Adequacy](#)

For more information

U.S. Energy Information Administration home page | www.eia.gov

State Energy Portal | www.eia.gov/state

Winter Heating Fuels Site | www.eia.gov/special/heatingfuels/

Movements of Propane by Rail |
http://www.eia.gov/dnav/pet/pet_move_railNA_a_EPLLPA_RAIL_mbbbl_m.htm

Today in Energy | www.eia.gov/todayinenergy

Short-Term Energy Outlook | www.eia.gov/steo

Energy Explained – Hydrocarbon Gas Liquids |
http://www.eia.gov/energyexplained/index.cfm?page=hgls_home

Annual Energy Outlook | www.eia.gov/aeo

International Energy Outlook | www.eia.gov/ieo

Monthly Energy Review | www.eia.gov/mer