
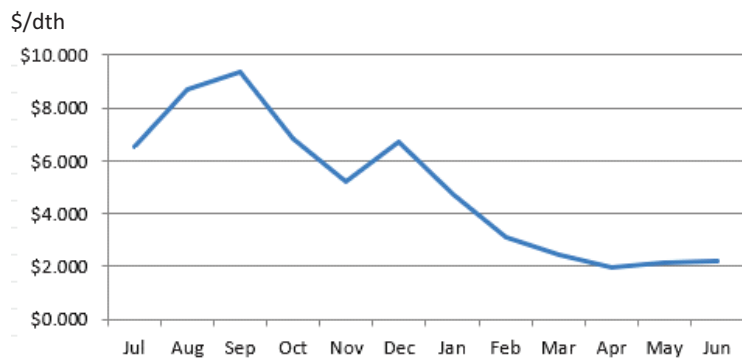


## Newstracker:

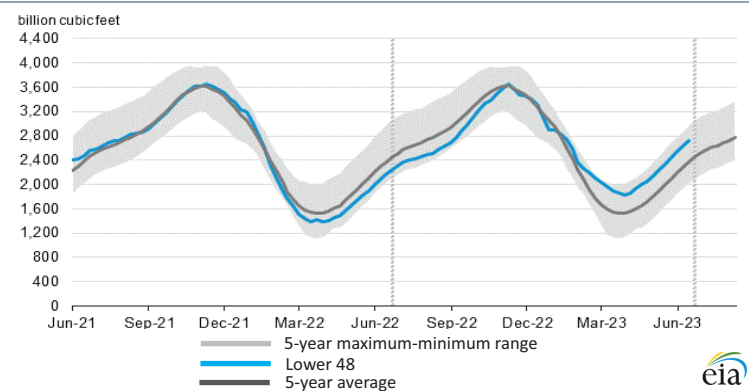
- Natural gas spot prices rose at most locations from Wednesday, June 14, to Wednesday, June 21 (the Report Week), during which the Henry Hub spot price rose 15 cents to \$2.230/MMBtu.
- The July 2023 NYMEX contract price increased to \$2.342/MMBtu, up 25.5 cents from last Report Week. The price of the 12-month strip averaging July 2023 through June 2024 futures contracts climbed 14.8 cents to \$3.171/MMBtu. International natural gas futures prices increased this Report Week, with LNG cargoes in East Asia rising \$2.21 to a weekly average of \$11.50/MMBtu, and prices at TTF in the Netherlands increasing \$1.77 to a weekly average of \$12.17/MMBtu. In the same week last year, prices were \$35.79/MMBtu in East Asia and \$38.23/MMBtu at TTF.
- Net natural gas injections into storage totaled 95 Bcf for the week ending June 16, compared with the five-year average net injections of 86 Bcf and last year's net injections of 76 Bcf during the same week. Working natural gas stocks totaled 2,729 Bcf, which is 362 Bcf (15%) more than the five-year average and 571 Bcf (26%) more than last year at this time.
- Total US consumption of natural gas rose by 1.6% (1.1 Bcf/d) to 68.2 Bcf/d compared with the previous Report Week. Natural gas consumed for power generation climbed by 5.1% (1.8 Bcf/d) week over week. Industrial sector consumption decreased by 1.0% (0.2 Bcf/d) week over week, and consumption in the residential and commercial sectors declined by 5.3% (0.5 Bcf/d). Natural gas exports to Mexico increased 3.0% (0.2 Bcf/d) to 6.6 Bcf/d. Natural gas deliveries to US LNG export facilities averaged 10.9 Bcf/d, 0.4 Bcf/d lower than last week.
- The natural gas plant liquids composite price at Mont Belvieu, Texas, rose by 14 cents/MMBtu, averaging \$5.66/MMBtu for the Report Week. Propane prices fell 1%, while the Brent crude oil price rose 3%, increasing the propane discount relative to crude oil by 6%.
- For the week ending Tuesday, June 13, the natural gas rig count decreased by 5 rigs from a week ago to 130 rigs. This is the lowest number of natural gas-directed rigs since the first week of March 2022. The number of oil-directed rigs decreased by 4 from a week ago to 552 rigs. This is the lowest number of oil-directed rigs since late April 2022. The total rig count, which includes 5 miscellaneous rigs, stands at 687.

Excerpted from 

## Monthly NYMEX Natural Gas Settle Price: Jul 2022 - Jun 2023:



## Working natural gas in underground storage as of June 16, 2023

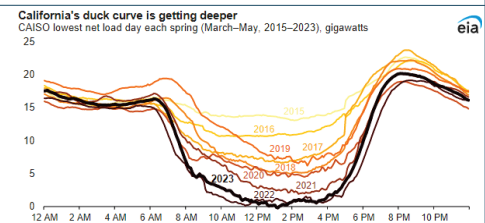


## Forward 12-month NYMEX natural gas strip price - Jul23-Jun24:

Process Load-weighted \$3.171/dth - w/o/w = ▲\$0.148  
 Typical Heat Load-weighted \$3.412/dth - w/o/w = ▲\$0.121

## As solar capacity grows, duck curves are getting deeper in California:

As more solar capacity has come online in California, its grid operators have observed a drop in net load (or the demand remaining after subtracting variable renewable generation) in the middle of the day when solar generation tends to be highest. When graphed for a typical day, the pattern created by the midday dip in the net load curve, followed by a steep rise in the evenings when solar generation drops off, looks like the outline of a duck, so this pattern is often called a duck curve. As solar capacity in California continues to grow, the midday dip in net load is getting lower, presenting challenges for grid operators. Grid operators constantly balance electricity generation with electricity demand in a region. Unlike conventional power plants (nuclear, coal-fired, and natural gas-fired plants), solar and wind resources can't be fully dispatched at will to help meet demand, and utilities may have to curtail them to protect grid operations. As more solar capacity comes online, conventional power plants are used less often during the middle of the day, and the duck curve deepens. The duck curve presents two challenges related to increasing solar energy adoption. The first challenge is grid stress. The extreme swing in demand for electricity from conventional power plants from midday to late evenings, when energy demand is still high but solar generation has dropped off, means that conventional power plants must quickly ramp up electricity production to meet consumer demand. That rapid ramp up makes it more difficult for grid operators to match grid supply with grid demand in real time. The other challenge is economics. The dynamics of the duck curve can challenge the traditional economics of dispatchable power plants because the factors contributing to the curve reduce the amount of time a conventional power plant operates, which results in reduced energy revenues. If the reduced revenues make the plants uneconomical to maintain, the plants may retire without a dispatchable replacement. Less dispatchable electricity makes it harder for grid managers to balance electricity supply and demand in a system with wide swings in net demand. The duck curve is not unique to California. It's increasingly occurring in other parts of the country and around the world in places where the share of solar generation is increasing compared with generation from conventional sources. In addition, a duck curve is becoming visible at the national level in the US.



"I always loved the signs on the outfield walls, and I'll never forget the one in Philadelphia. It said, 'The Phillies use Lifebuoy soap,' and underneath was scrawled, 'And they still stink.'" - Joe Garagiola<sup>1</sup>

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<sup>1</sup>[https://www.brainyquote.com/quotes/joe\\_garagiola\\_769625](https://www.brainyquote.com/quotes/joe_garagiola_769625)