

30 July 2021



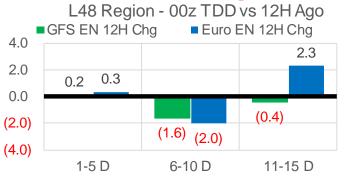
| | С | urrent | Δ from YD | Δ from 7D Avg | | |
|---------------|----|--------|------------------|------------------|-----|--|
| WTI Prompt | \$ | 73.44 | \$ (0.18) | \$ | 1.2 | |

| | \sim | urront | Δ from YD | Δ from 7D | | |
|-----------------|--------|--------|------------------|-----------|-----|--|
| | C | unen | Z HOIII 1D | Αv | g | |
| Brent Prompt | \$ | 76.04 | \$ (0.01) | \$ | 1.5 | |

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Price Summary

Vs. 12H Ago



Vs. 24H Ago

L48 Region - 00z TDD vs 24H Ago GFS EN 24H Chg ■ Euro EN 24H Chg 2.0 0.5 0.4 0.0 (0.5)(2.0)(1.2)(2.1)(4.0)(4.5)(6.0)1-5 D 6-10 D 11-15 D

Δ from YD

-0.62

Current

5.1

| | Current | Δ from YD | Δ from 7D Avg |
|----------------------|---------|---------------|------------------|
| US Dry Production | 91.5 | - 0.48 | ▼ -0.85 |

| US Dry Production | 91.5 | ▼ -0.48 | ▼ -0.85 | US Power Burns | 39.4 | ▼ -3.16 |
|----------------------|---------|----------------|------------------|-------------------|---------|----------------|
| | Current | Δ from YD | Δ from 7D Avg | | Current | Δ from YD |

| US ResComm | 8.0 | ▼ -0.43 | ▼ -0.13 | | |
|---------------|---------|----------------|------------------|--|--|
| | Current | Δ from YD | Δ from 7D Avg | | |

-0.08

10.8

Net LNG

Exports

| | Current | Δ from YD | Δ from 7D Avg |
|--------------------|---------|-----------|------------------|
| Mexican Exports | 7.3 | ▲ 0.04 | a 0.27 |

-0.02

Canadian

Imports

Δ from 7D

Avg

-2.76

Δ from 7D

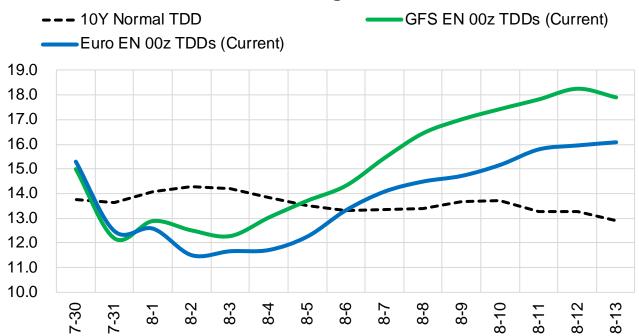
Avg

-0.50

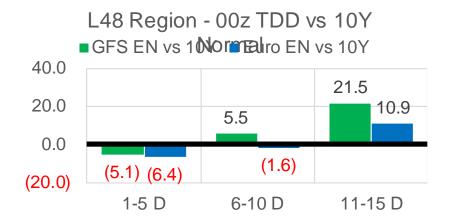


Short-term Weather Model Outlooks (00z)

L48 Region



Vs. 10Y Normal



Source: WSI, Bloomberg



Lower 48 Component Models

Daily Balances

| | 24-Jul | 25-Jul | 26-Jul | 27-Jul | 28-Jul | 29-Jul | 30-Jul | DoD | vs.7D |
|---|--------|--------|--------|--------|--------|--------|--------|---------------|---------------|
| Lower 48 Dry Production | 92.3 | 92.5 | 93.0 | 92.2 | 92.3 | 92.0 | 91.5 | ▼ -0.5 | ▼ -0.8 |
| Canadian Imports | 5.3 | 5.5 | 5.7 | 5.8 | 5.9 | 5.7 | 5.1 | ▼-0.6 | ▼ -0.6 |
| L48 Power | 40.0 | 41.5 | 43.6 | 44.2 | 43.1 | 42.5 | 39.4 | ▼-3.2 | ▼-3.1 |
| L48 Residential & Commercial | 7.7 | 7.8 | 8.3 | 8.3 | 8.5 | 8.4 | 8.0 | ▼-0.4 | ▼ -0.2 |
| L48 Industrial | 23.0 | 23.7 | 24.1 | 24.3 | 24.2 | 23.8 | 23.2 | ▼-0.6 | - 0.7 |
| L48 Lease and Plant Fuel | 5.1 | 5.1 | 5.1 | 5.1 | 5.1 | 5.1 | 5.1 | ▼ 0.0 | ▼ 0.0 |
| L48 Pipeline Distribution | 2.3 | 2.3 | 2.5 | 2.5 | 2.4 | 2.4 | 2.2 | ▼ -0.2 | ▼ -0.2 |
| L48 Regional Gas Consumption | 78.0 | 80.5 | 83.7 | 84.4 | 83.3 | 82.2 | 77.8 | ▼-4.4 | ▼ -4.2 |
| Net LNG Delivered | 10.88 | 10.82 | 10.74 | 10.83 | 10.90 | 10.86 | 10.78 | ▼ -0.1 | ▼ -0.1 |
| Total Mexican Exports | 6.6 | 6.5 | 7.0 | 7.5 | 7.4 | 7.3 | 7.3 | ▲ 0.0 | 0.3 |
| Implied Daily Storage Activity | 2.0 | 0.3 | -2.7 | -4.7 | -3.4 | -2.7 | 0.7 | | |
| EIA Reported Daily Storage Activity Daily Model Error | | | | | | | | | |

EIA Storage Week Balances

| 25-Jun | 2-Jul | 9-Jul | 16-Jul | 23-Jul | 30-Jul | WoW | vs. 4W |
|-------------|--|--|---|--|---|---|---|
| 93.2 | 92.2 | 91.8 | 92.3 | 92.2 | 92.4 | 0.2 | 0.3 |
| 4.7 | 5.2 | 5.1 | 5.2 | 4.9 | 5.6 | 0.6 | 0.5 |
| 34.4 | 39.7 | 37.1 | 38.7 | 39.7 | 42.1 | 2.4 | 3.3 |
| 8.4 | 8.3 | 7.9 | 8.2 | 8.3 | 8.1 | ▼-0.1 | ▼ -0.1 |
| 20.0 | 21.5 | 19.7 | 19.8 | 20.0 | 23.6 | 3.6 | 3.4 |
| 5.2 | 5.1 | 5.1 | 5.1 | 5.1 | 5.1 | 0.0 | 0.0 |
| 2.1 | 2.4 | 2.1 | 2.2 | 2.3 | 2.4 | 0.1 | 0.1 |
| 70.1 | 76.9 | 72.0 | 74.0 | 75.3 | 81.4 | 6.0 | 6.8 |
| 10.3 | 11.2 | 11.0 | 10.8 | 10.5 | 10.8 | 0.3 | ▼-0.1 |
| 7.6 | 7.2 | 7.1 | 7.1 | 7.0 | 7.0 | ▲ 0.0 | ▼-0.1 |
| 9.9 10.9 | 2.1 2.3 | 6.8 7.9 | 5.5 7.0 | 4.3 5.1 | -1.3 | -5.6 | |
| | 93.2 4.7 34.4 8.4 20.0 5.2 2.1 70.1 10.3 7.6 9.9 | 93.2 92.2 4.7 5.2 34.4 39.7 8.4 8.3 20.0 21.5 5.2 5.1 2.1 2.4 70.1 76.9 10.3 11.2 7.6 7.2 9.9 2.1 10.9 2.3 | 93.2 92.2 91.8 4.7 5.2 5.1 34.4 39.7 37.1 8.4 8.3 7.9 20.0 21.5 19.7 5.2 5.1 5.1 2.1 2.4 2.1 70.1 76.9 72.0 10.3 11.2 11.0 7.6 7.2 7.1 9.9 2.1 6.8 10.9 2.3 7.9 | 93.2 92.2 91.8 92.3 4.7 5.2 5.1 5.2 34.4 39.7 37.1 38.7 8.4 8.3 7.9 8.2 20.0 21.5 19.7 19.8 5.2 5.1 5.1 5.1 2.1 2.4 2.1 2.2 70.1 76.9 72.0 74.0 10.3 11.2 11.0 10.8 7.6 7.2 7.1 7.1 9.9 2.1 6.8 5.5 10.9 2.3 7.9 7.0 | 93.2 92.2 91.8 92.3 92.2 4.7 5.2 5.1 5.2 4.9 34.4 39.7 37.1 38.7 39.7 8.4 8.3 7.9 8.2 8.3 20.0 21.5 19.7 19.8 20.0 5.2 5.1 5.1 5.1 5.1 2.1 2.4 2.1 2.2 2.3 70.1 76.9 72.0 74.0 75.3 10.3 11.2 11.0 10.8 10.5 7.6 7.2 7.1 7.1 7.0 9.9 2.1 6.8 5.5 4.3 10.9 2.3 7.9 7.0 5.1 | 93.2 92.2 91.8 92.3 92.2 92.4 4.7 5.2 5.1 5.2 4.9 5.6 34.4 39.7 37.1 38.7 39.7 42.1 8.4 8.3 7.9 8.2 8.3 8.1 20.0 21.5 19.7 19.8 20.0 23.6 5.2 5.1 5.1 5.1 5.1 5.1 2.1 2.4 2.1 2.2 2.3 2.4 70.1 76.9 72.0 74.0 75.3 81.4 10.3 11.2 11.0 10.8 10.5 10.8 7.6 7.2 7.1 7.1 7.0 7.0 9.9 2.1 6.8 5.5 4.3 -1.3 10.9 2.3 7.9 7.0 5.1 | 93.2 92.2 91.8 92.3 92.2 92.4 ▲ 0.2 4.7 5.2 5.1 5.2 4.9 5.6 ▲ 0.6 34.4 39.7 37.1 38.7 39.7 42.1 ▲ 2.4 8.4 8.3 7.9 8.2 8.3 8.1 ▼ -0.1 20.0 21.5 19.7 19.8 20.0 23.6 ▲ 3.6 5.2 5.1 5.1 5.1 5.1 5.1 △ 0.0 2.1 2.4 2.1 2.2 2.3 2.4 ▲ 0.1 70.1 76.9 72.0 74.0 75.3 81.4 ▲ 6.0 10.3 11.2 11.0 10.8 10.5 10.8 ▲ 0.3 7.6 7.2 7.1 7.1 7.0 7.0 ▲ 0.0 9.9 2.1 6.8 5.5 4.3 -1.3 -5.6 10.9 2.3 7.9 7.0 5.1 |

| Monthly Balances | | | | | | | | | |
|--|---------|--------|--------|--------|--------|--------|--------|------------|---------------|
| • | 2Yr Ago | LY | | | | | MTD | | |
| | Jul-19 | Jul-20 | Mar-21 | Apr-21 | May-21 | Jun-21 | Jul-21 | MoM | vs. LY |
| Lower 48 Dry Production | 91.9 | 89.1 | 91.5 | 92.3 | 92.2 | 92.8 | 92.1 | ▼ -0.7 | 3.0 |
| Canadian Imports | 5.0 | 4.4 | 4.8 | 4.7 | 4.5 | 4.9 | 5.2 | 0.3 | ▲ 0.8 |
| L48 Power | 40.8 | 43.7 | 24.3 | 25.0 | 27.1 | 35.3 | 39.4 | 4.1 | ▼ -4.3 |
| L48 Residential & Commercial | 8.0 | 7.9 | 29.3 | 19.7 | 13.3 | 8.4 | 8.1 | ▼ -0.3 | 0.2 |
| L48 Industrial | 21.6 | 20.4 | 19.3 | 21.2 | 19.2 | 21.0 | 20.8 | ▼ -0.2 | 0.4 |
| L48 Lease and Plant Fuel | 5.0 | 4.9 | 5.0 | 5.1 | 5.1 | 5.1 | 5.1 | ▼ 0.0 | 0.2 |
| L48 Pipeline Distribution | 2.3 | 2.4 | 2.5 | 2.3 | 2.1 | 2.2 | 2.2 | 0.1 | ▼ -0.2 |
| L48 Regional Gas Consumption | 77.8 | 79.4 | 80.6 | 73.3 | 66.7 | 72.0 | 75.7 | 3.7 | ▼-3.7 |
| Net LNG Exports | 6.0 | 3.3 | 11.1 | 11.5 | 10.8 | 10.2 | 10.8 | 0.6 | 7.5 |
| Total Mexican Exports | 5.3 | 5.9 | 6.5 | 6.7 | 6.8 | 7.4 | 7.1 | ▼-0.4 | 1.2 |
| Implied Daily Storage Activity EIA Reported Daily Storage Activity | 7.8 | 5.0 | -2.0 | 5.5 | 12.4 | 8.0 | 3.7 | | |
| Daily Model Error | | | | | | | | | |



Daily Average Generation Data

Nuclear Generation Daily Average - GWh (NRC)

| | 23-Jul | 24-Jul | 25-Jul | 26-Jul | 27-Jul | 28-Jul | 29-Jul | DoD | vs. 7D |
|-------------------------------|--------|--------|--------|--------|--------|--------|--------|------|--------|
| NRC Nuclear Daily Output | 88.1 | 88.1 | 88.1 | 90.2 | 90.6 | 90.0 | 89.8 | -0.2 | 0.7 |
| NRC Nuclear Max Capacity | 104.9 | 104.9 | 104.9 | 104.9 | 104.9 | 104.9 | 104.9 | 0.0 | 0.0 |
| NRC Nuclear Outage | 16.8 | 16.8 | 16.8 | 14.7 | 14.3 | 14.9 | 15.0 | 0.2 | -0.7 |
| NRC % Nuclear Cap Utilization | 89.6 | 89.6 | 89.6 | 91.7 | 92.1 | 91.5 | 91.4 | -0.2 | 0.7 |

Wind Generation Daily Average - MWh (EIA)

| | 23-Jul | 24-Jul | 25-Jul | 26-Jul | 27-Jul | 28-Jul | 29-Jul | DoD | vs. 7D |
|------------|--------|--------|--------|--------|--------|--------|--------|-----|--------|
| CALI Wind | 2083 | 2283 | 2561 | 1522 | 879 | 1754 | 1754 | 0 | -93 |
| TEXAS Wind | 15356 | 12202 | 8893 | 6079 | 4279 | 5594 | 5594 | 0 | -3140 |
| US Wind | 44311 | 35200 | 25751 | 23692 | 22328 | 28948 | 28948 | 0 | -1090 |

Generation Daily Average - MWh (EIA)

| | 23-Jul | 24-Jul | 25-Jul | 26-Jul | 27-Jul | 28-Jul | 29-Jul | DoD | vs. 7D |
|--------------|--------|--------|--------|--------|--------|--------|--------|-----|--------|
| US Wind | 44311 | 35200 | 25751 | 23692 | 22328 | 28948 | 28948 | 0 | -1090 |
| US Solar | 13713 | 13419 | 13653 | 12092 | 14433 | 12819 | 12819 | 0 | -536 |
| US Petroleum | 4240 | 4458 | 4230 | 5003 | 5264 | 5033 | 5033 | 0 | 328 |
| US Other | 8939 | 8889 | 8805 | 9371 | 9353 | 9136 | 9136 | 0 | 54 |
| US Coal | 136904 | 136164 | 141498 | 152143 | 151434 | 153194 | 153194 | 0 | 7972 |
| US Nuke | 90641 | 91058 | 92840 | 92850 | 93252 | 92079 | 92079 | 0 | -41 |
| US Hydro | 30221 | 27861 | 26806 | 29905 | 29833 | 29950 | 29950 | 0 | 854 |
| US Gas | 203302 | 202131 | 207181 | 235677 | 241140 | 237758 | 237758 | 0 | 16560 |

See National Wind and Nuclear daily charts



Storage Week Average Generation Data

Nuclear Generation Weekly Average - GWh (NRC)

| | 25-Jun | 2-Jul | 9-Jul | 16-Jul | 23-Jul | 30-Jul | WoW | WoW Bcf/d Impact |
|-------------------------------|--------|-------|-------|--------|--------|--------|------|------------------------|
| NRC Nuclear Daily Output | 89.9 | 89.1 | 89.5 | 90.7 | 90.7 | 89.3 | -1.4 | 0.2 |
| NRC Nuclear Max Capacity | 104.9 | 104.9 | 104.9 | 104.9 | 104.9 | 104.9 | 0.0 | |
| NRC Nuclear Outage | 15.0 | 15.7 | 15.4 | 14.2 | 14.2 | 15.6 | 1.4 | |
| NRC % Nuclear Cap Utilization | 9% | 9% | 9% | 9% | 9% | 9% | 0% | |

Wind Generation Weekly Average - MWh (EIA)

| | 25-Jun | 2-Jul | 9-Jul | 16-Jul | 23-Jul | 30-Jul | WoW | WoW Bcf/d Impact |
|------------|--------|-------|-------|--------|--------|--------|------|------------------------|
| CALI Wind | 2568 | 2588 | 2604 | 3004 | 2064 | 1834 | -231 | 0.0 |
| TEXAS Wind | 13415 | 8326 | 3739 | 10817 | 7162 | 8285 | 1123 | -0.2 |
| US Wind | 49248 | 27216 | 25698 | 36365 | 26445 | 29883 | 3438 | -0.6 |

Generation Weekly Average - MWh (EIA)

| | 25-Jun | 2-Jul | 9-Jul | 16-Jul | 23-Jul | 30-Jul | WoW | WoW Bcf/d Impact |
|--------------|--------|--------|--------|--------|--------|--------|-------|------------------------|
| US Wind | 49248 | 27216 | 25698 | 36365 | 26445 | 29883 | 3438 | -0.6 |
| US Solar | 14070 | 14060 | 14162 | 14488 | 13949 | 13278 | -671 | 0.1 |
| US Petroleum | 3331 | 5142 | 4035 | 4282 | 3892 | 4751 | 860 | -0.1 |
| US Other | 8246 | 8886 | 9159 | 9554 | 9301 | 9090 | -211 | 0.0 |
| US Coal | 118233 | 136480 | 131305 | 131524 | 137034 | 146362 | 9327 | -1.6 |
| US Nuke | 93426 | 92257 | 92359 | 93735 | 93171 | 92114 | -1057 | 0.2 |
| US Hydro | 32186 | 33024 | 30127 | 30420 | 30031 | 29218 | -813 | 0.1 |
| US Gas | 180182 | 208732 | 194610 | 199730 | 209198 | 223564 | 14366 | |

See National Wind and Nuclear daily charts

Monthly Average Generation Data

| Nuclear Generation Monthly Average - GWh (NRC) | | | | | | | | | | | |
|--|-----------------|-----------------|--------|--------|--------|--------|-----------------|--------------------|---------------------|--|--|
| | 2Yr Ago | 2Yr Ago LY | | | | | | MTD | | | |
| | Same 30 days | Same 30 days | Apr-21 | May-21 | Jun-21 | Jul-21 | Last 30 days | MoM (MTD vs LY) | Last 30 days YoY | | |
| NRC Nuclear Daily Output | 94.7 | 91.3 | 75.9 | 81.8 | 88.7 | 90.0 | 90.0 | 1.3 | -1.4 | | |
| NRC Nuclear Max Capacity | 104.9 | 104.9 | 104.9 | 104.9 | 104.9 | 104.9 | 104.9 | 0.0 | 0.0 | | |
| NRC Nuclear Outage | 10.2 | 13.5 | 29.0 | 23.1 | 16.2 | 14.9 | 14.9 | -1.3 | 1.4 | | |
| NRC % Nuclear Cap Utilization | 96.3 | 92.9 | 77.1 | 83.2 | 90.2 | 91.5 | 91.5 | 1.3 | -1.4 | | |

Wind Generation Monthly Average - MWh (Genscape)

| | 2Yr Ago | LY | | | | MTD | | | |
|------------|-----------------|-----------------|--------|--------|--------|--------|-----------------|--------------------|---------------------|
| | Same 30 days | Same 30 days | Apr-21 | May-21 | Jun-21 | Jul-21 | Last 30 days | MoM (MTD vs LY) | Last 30 days YoY |
| CALI Wind | 2665 | 2490 | 3113 | 3402 | 2913 | 2340 | 2340 | -573 | -149 |
| TEXAS Wind | 8257 | 9395 | 12104 | 12259 | 9675 | 7338 | 7338 | -2337 | -2057 |
| US Wind | 28545 | 30556 | 50707 | 46081 | 37299 | 29343 | 29343 | -7957 | -1213 |

Generation Monthly Average - MWh (EIA)

| Concretion monthly Avorage | 2Yr Ago | LY | | | | MTD | | | |
|----------------------------|-----------------|-----------------|--------|--------|--------|--------|-----------------|--------------------|---------------------|
| | Same 30 days | Same 30 days | Apr-21 | May-21 | Jun-21 | Jul-21 | Last 30 days | MoM (MTD vs LY) | Last 30 days YoY |
| US Wind | 28545 | 30556 | 50707 | 46081 | 37299 | 29343 | 29343 | a 0.0 | ▼ -1213 |
| US Solar | 9587 | 12375 | 13194 | 14486 | 14563 | 13966 | 13966 | 0.0 | 1590 |
| US Petroleum | 5204 | 5040 | 2652 | 3012 | 4149 | 4270 | 4270 | 0 | ▼ -771 |
| US Other | 8975 | 9962 | 7157 | 7439 | 8162 | 9281 | 9281 | a 0 | ▼ -682 |
| US Coal | 132162 | 121495 | 75976 | 86422 | 121348 | 137304 | 137304 | 0 | 15809 |
| US Nuke | 101409 | 93588 | 79237 | 85517 | 92175 | 92795 | 92795 | 0 | ▼ -793 |
| US Hydro | 34442 | 33144 | 28449 | 30677 | 32575 | 30022 | 30022 | a 0 | ▼ -3122 |
| US Gas | 214150 | 228785 | 133124 | 139477 | 188818 | 207792 | 207792 | 0 | ▼-20993 |
| US Total | 535966 | 534652 | 390890 | 413562 | 499436 | 525257 | 525257 | a 0 | ▼ -9395 |



See National Wind and Nuclear daily charts



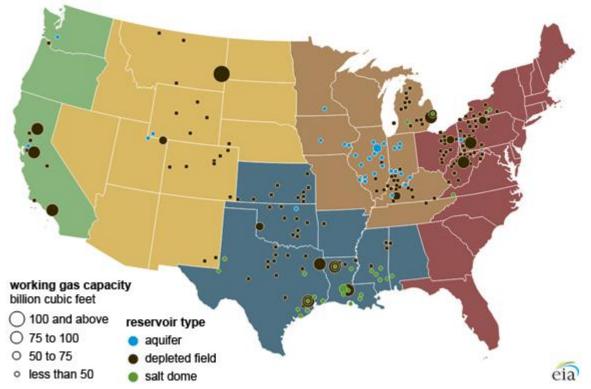
Regional S/D Models Storage Projection

Week Ending 30-Jul

| | Daily Raw Storage | Daily Adjustment Factor | Daily Average Storage Activity (Adjusted) * | Weekly Adjusted Storage Activity |
|---------------|----------------------|-------------------------------|---|---|
| L48 | -1.6 | 1.3 | -0.3 | 13 |
| | | | | |
| East | 1.2 | 1.4 | 2.6 | 18 |
| Midwest | 1.9 | -0.4 | 1.4 | 10 |
| Mountain | 4.4 | -4.1 | 0.3 | 2 |
| South Central | -8.2 | 4.4 | -3.8 | -12 |
| Pacific | -0.8 | 0.0 | -0.8 | -6 |

^{*}Adjustment Factor is calcuated based on historical regional deltas

U.S. underground natural gas storage facilities by type (July 2015)



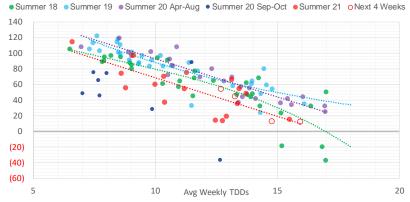


Weather Model Storage Projection

| Next report |
|-------------|
| and beyond |

| | | Week Storage |
|-------------|-------|--------------|
| Week Ending | GWDDs | Projection |
| 30-Jul | 14.8 | 13 |
| 06-Aug | 12.7 | 54 |
| 13-Aug | 16.0 | 12 |
| 20-Aug | 13.3 | 45 |

Weather Storage Model - Next 4 Week Forecast



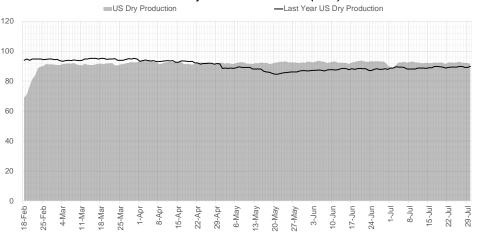
Go to larger image



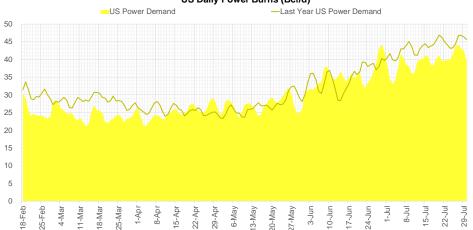


Supply - Demand Trends

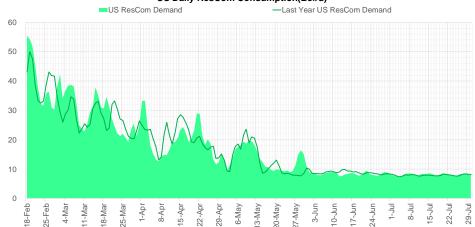
US Dry Natural Gas Production (Bcf/d)



US Daily Power Burns (Bcf/d)



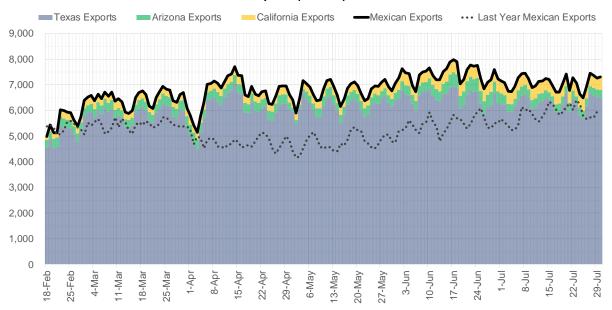
US Daily ResCom Consumption(Bcf/d)



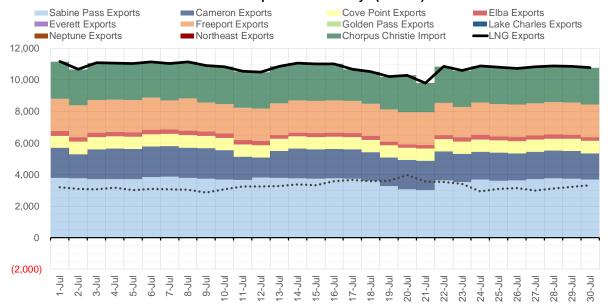
Source: Bloomberg



Mexican Exports (MMcf/d)



Net LNG Exports - Last 30 days (MMcf/d)



Source: Bloomberg





Nat Gas Options Volume and Open Interest CME, ICE and Nasdaq Combined

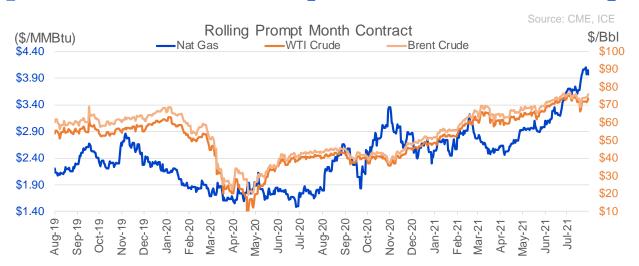
| CONTRACT MONTH | CONTRACT YEAR | PUT/CALL | STRIKE | CUMULATIVE VOL | CONTRACT MONTH | CONTRACT YEAR | PUT/CALL | STRIKE | CUMULATIVE OI |
|-------------------|------------------|----------|--------|-------------------|-------------------|------------------|----------|--------------|----------------|
| | | _ | | | | | | 100 | |
| 9 | 2021 | С | 4.50 | 7790 | 10 | 2021 | С | 4.00 | 41857 |
| 9 | 2021 | P | 3.25 | 7461 | 10 | 2021 | С | 5.00 | 33875 |
| 9 | 2021 | P | 3.50 | 5486 | 10 | 2021 | С | 3.50 | 33005 |
| 9 | 2021 | С | 4.25 | 5005 | 9 | 2021 | С | 4.00 | 30880 |
| 10 | 2021 | С | 4.50 | 4271 | 10 | 2021 | P | 2.50 | 30078 |
| 9 | 2021 | Р | 2.90 | 3802 | 10 | 2021 | С | 4.50 | 29455 |
| 9 | 2021 | С | 4.00 | 3744 | 10 | 2021 | C P | 3.25 | 28230 |
| 9 | 2021 | Р | 3.70 | 2787 | 10 | 2021 2021 | P P | 2.75 | 26775 |
| 9 | 2021 | Р | 3.75 | 2746 | 10 | | P P | 2.00 | 26497 |
| 10 | 2021 | С | 5.00 | 2734 | 12 | 2021 | P P | 2.75 | 24346 |
| 9 | 2021 | Р | 4.00 | 2721 | 9 10 | 2021 | P | 2.50 | 23376 |
| 10 | 2021 | С | 4.35 | 2650 | | 2021 | | 3.50 | 23341 |
| 9 | 2021 | С | 5.00 | 2540 | 9 | 2021 | C P | 3.50 | 23108 |
| 10 | 2021 | Р | 3.00 | 2451 | 10 | 2021 | | 3.00 | 22909 |
| 9 | 2021 | Р | 3.60 | 2418 | 11 | 2021 | C C | 4.00 | 22667 |
| 10 | 2021 | Р | 3.75 | 2113 | 12 | 2021 | P | 4.00 | 21756 |
| 3 | 2022 | Р | 2.00 | 1800 | 12 | 2021 | P P | 2.50 | 21309 |
| 9 | 2021 | Р | 3.40 | 1770 | 9 | 2021 | P P | 2.00 | 20427 |
| 10 | 2021 | Р | 3.50 | 1644 | 9 | 2021 | P P | 3.00 | 20349 |
| 9 | 2021 | С | 4.75 | 1614 | 10 | 2021 | C | 2.25 | 19800 |
| 10 | 2021 | Р | 3.25 | 1231 | 4 | 2022 | | 3.00 | 19610 |
| 9 | 2021 | С | 4.20 | 1165 | 9 | 2021 | С | 3.25 | 18995 |
| 10 | 2021 | Р | 2.75 | 1120 | 10 | 2021 | C P | 3.00 | 18501 |
| 10 | 2021 | С | 4.75 | 1062 | 11 9 | 2021 2021 | C | 3.00 4.50 | 18017 |
| 4 | 2022 | С | 4.00 | 926 | 9 10 | 2021 | C | 4.50 3.75 | 17450 16789 |
| 5 | 2022 | С | 4.00 | 925 | 9 | 2021 | C | 3.75 4.25 | 16652 |
| 6 | 2022 | С | 4.00 | 925 | 9 | 2021 | P | 4.25 3.50 | 16594 |
| 7 | 2022 | С | 4.00 | 925 | 9 10 | 2021 | C | 6.00 | 16468 |
| 8 | 2022 | С | 4.00 | 925 | 3 | 2021 | C | 5.00 | 16336 |
| 9 | 2022 | С | 4.00 | 925 | 9 | 2022 | C | 5.00 | 16290 |
| 10 | 2022 | С | 4.00 | 925 | 12 | 2021 | P | 3.00 | 16091 |
| 1 | 2022 | С | 5.00 | 920 | 9 | 2021 | P | 2.75 | 15821 |
| 9 | 2021 | С | 5.10 | 903 | 11 | 2021 | C | 3.75 | 15339 |
| 9 | 2021 | Р | 5.10 | 901 | 1 | 2021 | C | 4.00 | 14698 |
| 9 | 2021 | Р | 5.00 | 900 | 11 | 2022 | C | 5.00 | 14507 |
| 2 | 2022 | Р | 3.50 | 850 | 3 | 2022 | C | 3.00 | 14448 |
| 2 | 2022 | Р | 4.00 | 800 | 1 | 2022 | C | 5.00 | 14215 |
| 10 | 2021 | С | 6.00 | 761 | 11 | 2021 | P | 2.50 | 13994 |
| 9 | 2021 | Р | 3.90 | 713 | 12 | 2021 | P | 2.00 | 13889 |
| 4 | 2022 | Р | 2.50 | 676 | 9 | 2021 | P | 2.60 | 13814 |
| 3 | 2022 | Р | 2.50 | 660 | 9 | 2021 | P | 3.25 | 13800 |
| 10 | 2021 | С | 4.25 | 618 | 9 | 2021 | P | 1.90 | 13773 |
| 10 | 2021 | Č | 5.25 | 600 | 2 | 2022 | C | 5.00 | 13595 |
| 1 | 2022 | P | 4.00 | 600 | 2 | 2022 | Č | 4.00 | 13562 |
| 11 | 2021 | C | 6.50 | 564 | 5 | 2022 | Č | 3.00 | 13050 |
| 4 | 2022 | Ċ | 5.00 | 550 | 9 | 2022 | P | 2.25 | 12762 |
| 5 | 2022 | Č | 5.00 | 550 | 6 | 2022 | C | 3.00 | 12755 |
| 6 | 2022 | Č | 5.00 | 550 | 9 | 2021 | Č | 3.00 | 12592 |
| 7 | 2022 | Č | 5.00 | 550 | 7 | 2022 | | | 12547 |
| • | | - | 2.00 | -30 | • | | Source | : CME, ICE | .20 !! |



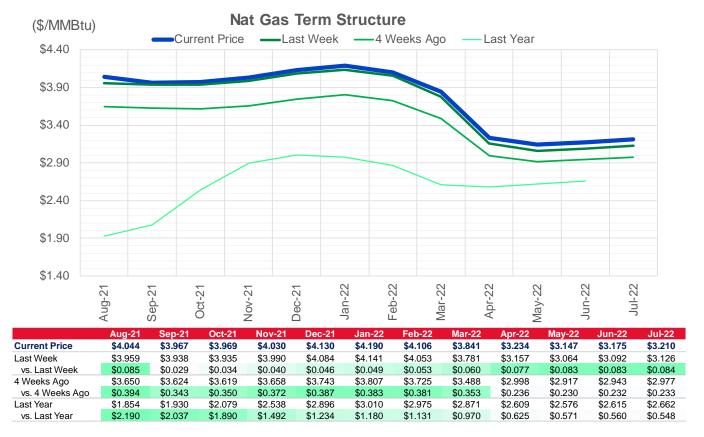
Nat Gas Futures Open Interest

CME, and ICE Combined

| CME Henry Hub Futures (10,000 MMBtu) ICE Henry Hub Futures Contract Equivalent (10,000 MM | | | | | | | | | |
|--|---------|--------|--------------|-------------|---------|--------|--------------|--|--|
| CME Henry I | | | | ICE Henry I | | | · · · · · | | |
| | Current | Prior | Daily Change | | Current | Prior | Daily Change | | |
| SEP 21 | 338079 | 337479 | 337583 | SEP 21 | 95341 | 95346 | -385 | | |
| OCT 21 | 161116 | 159132 | -176363 | OCT 21 | 106366 | 104662 | -5 | | |
| NOV 21 | 124651 | 122605 | -34481 | NOV 21 | 72308 | 73141 | 1704 | | |
| DEC 21 | 74750 | 74047 | -47855 | DEC 21 | 73283 | 72888 | -833 | | |
| JAN 22 | 121633 | 120737 | 47586 | JAN 22 | 78105 | 78832 | 396 | | |
| FEB 22 | 51410 | 50703 | -69327 | FEB 22 | 68937 | 68753 | -728 | | |
| MAR 22 | 102256 | 101561 | 51553 | MAR 22 | 68021 | 68250 | 184 | | |
| APR 22 | 104927 | 104005 | 3366 | APR 22 | 66483 | 66108 | -229 | | |
| MAY 22 | 87671 | 87284 | -16334 | MAY 22 | 66812 | 66786 | 375 | | |
| JUN 22 | 29124 | 28733 | -58160 | JUN 22 | 55866 | 55639 | 27 | | |
| JUL 22 | 23850 | 23709 | -4883 | JUL 22 | 54946 | 54775 | 227 | | |
| AUG 22 | 24653 | 24263 | 944 | AUG 22 | 56387 | 56239 | 171 | | |
| SEP 22 | 24414 | 24357 | 151 | SEP 22 | 56030 | 55835 | 148 | | |
| OCT 22 | 60034 | 59506 | 35677 | OCT 22 | 60394 | 58977 | 195 | | |
| NOV 22 | 25380 | 25268 | -34126 | NOV 22 | 48272 | 48265 | 1417 | | |
| DEC 22 | 22131 | 21619 | -3137 | DEC 22 | 50477 | 50453 | 8 | | |
| JAN 23 | 16516 | 16470 | -5103 | JAN 23 | 30650 | 30559 | 23 | | |
| FEB 23 | 5656 | 5646 | -10814 | FEB 23 | 26344 | 26278 | 91 | | |
| MAR 23 | 7617 | 7595 | 1971 | MAR 23 | 27963 | 27860 | 66 | | |
| APR 23 | 9804 | 9491 | 2209 | APR 23 | 22838 | 22657 | 103 | | |
| MAY 23 | 5492 | 5770 | -3999 | MAY 23 | 23821 | 23690 | 182 | | |
| JUN 23 | 2308 | 2366 | -3462 | JUN 23 | 22134 | 22009 | 131 | | |
| JUL 23 | 2587 | 2572 | 221 | JUL 23 | 22407 | 22270 | 126 | | |
| AUG 23 | 1822 | 1770 | -750 | AUG 23 | 22423 | 22284 | 137 | | |
| SEP 23 | 2036 | 1987 | 266 | SEP 23 | 21783 | 21656 | 139 | | |
| OCT 23 | 2679 | 2653 | 692 | OCT 23 | 23442 | 23302 | 127 | | |
| NOV 23 | 1213 | 1213 | -1440 | NOV 23 | 22334 | 22281 | 140 | | |
| DEC 23 | 1752 | 1742 | 539 | DEC 23 | 21773 | 21724 | 53 | | |
| JAN 24 | 993 | 993 | -749 | JAN 24 | 12918 | 12948 | 49 | | |
| FEB 24 | 838 | 993 | -155 | FEB 24 | 12918 | 12948 | -30 | | |







| | | Cash | Prompt | Cash to |
|-----------------------|----------|---------|--------|---------|
| | Units | Settled | Settle | Prompt |
| AGT Citygate | \$/MMBtu | 2.88 | 3.59 | 0.71 |
| TETCO M3 | \$/MMBtu | 3.20 | 3.46 | 0.26 |
| FGT Zone 3 | \$/MMBtu | 3.16 | 4.08 | 0.92 |
| Zone 6 NY | \$/MMBtu | 3.16 | 3.41 | 0.26 |
| Chicago Citygate | \$/MMBtu | 3.81 | 3.84 | 0.03 |
| Michcon | \$/MMBtu | 3.82 | 3.81 | -0.01 |
| Columbia TCO Pool | \$/MMBtu | 3.29 | 3.28 | -0.02 |
| Ventura | \$/MMBtu | 3.62 | 3.77 | 0.15 |
| Rockies/Opal | \$/MMBtu | 3.89 | 3.72 | -0.17 |
| El Paso Permian Basin | \$/MMBtu | 3.87 | 3.83 | -0.04 |
| Socal Citygate | \$/MMBtu | 7.75 | 5.72 | -2.04 |
| Malin | \$/MMBtu | 4.00 | 4.24 | 0.24 |
| Houston Ship Channel | \$/MMBtu | 3.99 | 3.98 | -0.01 |
| Henry Hub Cash | \$/MMBtu | 4.00 | 3.74 | -0.26 |
| AECO Cash | C\$/GJ | 3.19 | 3.01 | -0.18 |
| Station2 Cash | C\$/GJ | 3.13 | 4.12 | 0.99 |
| Dawn Cash | C\$/GJ | 3.73 | 3.83 | 0.10 |

Source: CME, Bloomberg



| | | | vs. 4 Weeks | | | | | |
|-------------------------|--------------|----------------------|-------------|------------------|--|--------|----|-------------|
| | Units | Current Price | vs. | Last Week | | Ago | VS | . Last Year |
| NatGas Jul21/Oct21 | \$/MMBtu | 0.443 | | 0.084 | | 0.437 | | 0.431 |
| NatGas Oct21/Nov21 | \$/MMBtu | 0.059 | | 0.002 | | 0.017 | | 0.008 |
| NatGas Oct21/Jan22 | \$/MMBtu | 0.216 | | 0.011 | | 0.025 | • | -0.064 |
| NatGas Apr22/Oct22 | \$/MMBtu | -0.018 | | 0.001 | | -0.010 | • | -0.085 |
| WTI Crude | \$/Bbl | 73.62 | | 1.710 | | -1.610 | | 33.700 |
| Brent Crude | \$/Bbl | 76.05 | | 2.260 | | 0.210 | | 33.110 |
| Fuel Oil, NY Harbour 1% | \$/Bbl | 97.18 | | 0.000 | | 0.000 | | 0.000 |
| Heating Oil | cents/Gallon | 218.94 | | 5.680 | | 3.320 | | 97.750 |
| Propane, Mt. Bel | cents/Gallon | 1.09 | | 0.003 | | -0.007 | | 0.603 |
| Ethane, Mt. Bel | cents/Gallon | 0.31 | | 0.001 | | 0.012 | | 0.098 |
| Coal, PRB | \$/MTon | 12.30 | | 0.000 | | 0.000 | | 0.000 |
| Coal, PRB | \$/MMBtu | 0.70 | | | | | | |
| Coal, ILB | \$/MTon | 31.05 | | 0.000 | | 0.000 | | 0.000 |
| Coal, ILB | \$/MMBtu | 1.32 | | | | | | |



