

3 June 2021



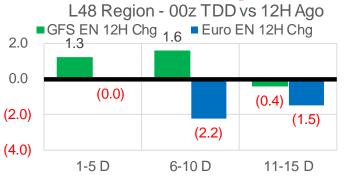
| | С | urrent | Δ from YD | Δ from 7 Avg | 'D |
|---------------|----|--------|------------------|-----------------|-----|
| WTI Prompt | \$ | 68.69 | \$ (0.14) | \$ 1 | 1.7 |

| | C | urro nt | Δ from YD | Δ from 7D | | |
|--------|-----------|---------|------------------|-----------|-----|--|
| | Current Δ | | Av | g | | |
| Brent | \$ | 71.26 | \$ (0.09) | \$ | 1.4 | |
| Prompt | • | | + (0100) | • | | |

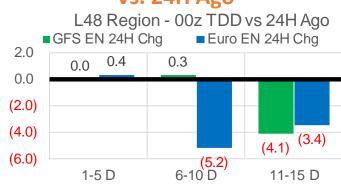
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Vs. 12H Ago



Vs. 24H Ago



| | Current | Δ from YD | Δ from 7D Avg |
|----------------------|---------|----------------|------------------|
| US Dry Production | 90.6 | ▼ -1.18 | ▼ -1.18 |

| | Current | Δ from YD | Δ from 7D Avg | | |
|-------------------|---------|----------------|------------------|--|--|
| US Power Burns | 31.1 | ▼ -0.19 | 3.01 | | |
| | | | | | |

| | Current | Δ from YD | Δ from 7D Avg |
|---------------|---------|----------------|------------------|
| US ResComm | 8.2 | ▼ -0.37 | ▼ -4.00 |

| | Current | Δ from YD | Δ from 7D Avg | | |
|---------------------|---------|----------------|------------------|--|--|
| Canadian Imports | 4.0 | ▼ -0.25 | a 0.07 | | |

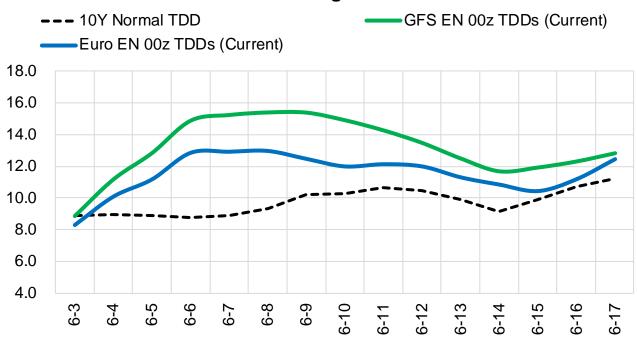
| | Current | Δ from YD | Δ from 7D Avg |
|--------------------|---------|-----------|------------------|
| Net LNG Exports | 10.8 | ▼ -0.10 | ▼ -0.19 |

| | Current | Δ from YD | Δ from 7D Avg |
|--------------------|---------|-----------|------------------|
| Mexican Exports | 7.2 | ▼ -0.26 | 0.12 |

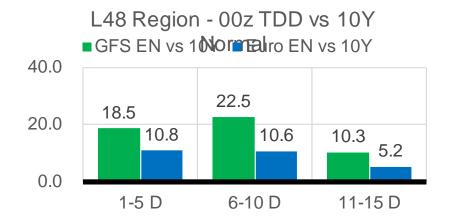


Short-term Weather Model Outlooks (00z)

L48 Region



Vs. 10Y Normal



Source: WSI, Bloomberg



Lower 48 Component Models

Daily Balances

| | 28-May | 29-May | 30-May | 31-May | 1-Jun | 2-Jun | 3-Jun | DoD | vs. 7D |
|--|--------|--------|--------|--------|-------|-------|-------|--------------|---------------|
| Lower 48 Dry Production | 91.6 | 91.5 | 91.9 | 91.5 | 92.3 | 91.8 | 90.6 | ▼-1.2 | ▼-1.2 |
| Canadian Imports | 3.7 | 3.8 | 3.8 | 3.8 | 3.8 | 4.3 | 4.0 | ▼-0.2 | ▲ 0.2 |
| L48 Power | 27.1 | 25.0 | 25.2 | 26.4 | 30.9 | 31.3 | 31.1 | ▼-0.2 | 3.5 |
| L48 Residential & Commercial | 14.7 | 16.3 | 15.0 | 10.8 | 8.7 | 8.5 | 8.2 | ▼-0.4 | ▼ -4.2 |
| L48 Industrial | 18.7 | 18.0 | 17.4 | 16.8 | 16.8 | 17.2 | 17.8 | _ 0.6 | 0.3 |
| L48 Lease and Plant Fuel | 5.0 | 5.0 | 5.0 | 5.0 | 5.1 | 5.1 | 5.0 | ▼-0.1 | ▼ 0.0 |
| L48 Pipeline Distribution | 2.1 | 2.1 | 2.1 | 1.9 | 2.0 | 2.0 | 1.9 | ▼ 0.0 | ▼ -0.1 |
| L48 Regional Gas Consumption | 67.7 | 66.4 | 64.7 | 60.9 | 63.5 | 64.1 | 64.0 | ▼ -0.1 | ▼ -0.5 |
| Net LNG Delivered | 10.79 | 11.23 | 11.27 | 11.16 | 11.13 | 10.87 | 10.77 | ▼ -0.1 | ▼ -0.3 |
| Total Mexican Exports | 7.3 | 7.0 | 6.7 | 7.1 | 7.2 | 7.5 | 7.2 | ▼ -0.3 | ▲ 0.1 |
| Implied Daily Storage Activity EIA Reported Daily Storage Activity Daily Model Error | 9.6 | 10.7 | 13.0 | 16.2 | 14.2 | 13.6 | 12.6 | | |

EIA Storage Week Balances

| | 23-Apr | 30-Apr | 7-May | 14-May | 21-May | 28-May | WoW | vs. 4W |
|-------------------------------------|--------|--------|-------|--------|--------|--------|------------|---------------|
| Lower 48 Dry Production | 90.7 | 91.2 | 91.3 | 91.5 | 91.4 | 92.1 | 0.7 | 0.7 |
| Canadian Imports | 5.4 | 4.6 | 4.6 | 4.8 | 4.6 | 4.5 | ▼ -0.1 | ▼-0.2 |
| L48 Power | 25.7 | 26.5 | 26.6 | 26.0 | 26.6 | 29.8 | 3.2 | 3.4 |
| L48 Residential & Commercial | 24.2 | 16.7 | 13.9 | 18.2 | 10.5 | 9.4 | ▼-1.1 | ▼- 5.4 |
| L48 Industrial | 19.3 | 19.5 | 19.8 | 18.1 | 20.0 | 19.8 | ▼ -0.2 | 0.4 |
| L48 Lease and Plant Fuel | 4.9 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 0.0 | 0.0 |
| L48 Pipeline Distribution | 2.5 | 2.1 | 2.1 | 2.3 | 1.9 | 2.0 | 0.1 | ▼-0.1 |
| L48 Regional Gas Consumption | 76.7 | 69.9 | 67.4 | 69.6 | 64.1 | 66.1 | 1.9 | ▼-1.7 |
| Net LNG Exports | 11.6 | 11.4 | 11.3 | 11.0 | 10.4 | 10.5 | 0.1 | ▼ -0.5 |
| Total Mexican Exports | 6.8 | 6.7 | 6.7 | 6.8 | 6.8 | 6.7 | ▼ 0.0 | ▲ 0.0 |
| Implied Daily Storage Activity | 1.0 | 7.9 | 10.5 | 9.0 | 14.7 | 13.3 | -1.5 | |
| EIA Reported Daily Storage Activity | 2.1 | 8.6 | 10.1 | 10.1 | 16.4 | | | |
| Daily Model Error | -1.2 | -0.7 | 0.4 | -1.2 | -1.7 | | | |

| Monthly Balances | | | | | | | | | |
|--|---------|--------|--------|--------|--------|--------|--------|---------------|----------------|
| • | 2Yr Ago | LY | | | | | MTD | | |
| | Jun-19 | Jun-20 | Feb-21 | Mar-21 | Apr-21 | May-21 | Jun-21 | MoM | vs. LY |
| Lower 48 Dry Production | 91.5 | 87.7 | 85.2 | 91.8 | 91.4 | 91.6 | 91.5 | ▼ 0.0 | ▼-0.2 |
| Canadian Imports | 4.7 | 4.0 | 6.3 | 4.8 | 4.7 | 4.5 | 4.0 | ▼ -0.5 | ▼-0.7 |
| L48 Power | 33.1 | 34.9 | 27.7 | 24.3 | 25.0 | 27.1 | 31.1 | 4.0 | 6.8 |
| L48 Residential & Commercial | 9.0 | 8.8 | 47.1 | 29.3 | 20.0 | 13.1 | 8.5 | ▼ -4.6 | ▼ -20.8 |
| L48 Industrial | 22.5 | 19.9 | 21.3 | 19.7 | 20.3 | 19.2 | 17.3 | -1.9 | ▼ -2.4 |
| L48 Lease and Plant Fuel | 5.0 | 4.8 | 4.7 | 5.0 | 5.0 | 5.0 | 5.1 | 0.0 | 0.0 |
| L48 Pipeline Distribution | 2.1 | 2.2 | 3.3 | 2.5 | 2.2 | 2.1 | 2.0 | ▼ -0.1 | ▼ -0.6 |
| L48 Regional Gas Consumption | 71.7 | 70.7 | 104.1 | 80.9 | 72.5 | 66.5 | 63.9 | ▼ -2.6 | ▼-17.0 |
| Net LNG Exports | 5.5 | 4.0 | 8.6 | 11.1 | 11.5 | 10.8 | 10.9 | ▲ 0.1 | ▼-0.2 |
| Total Mexican Exports | 5.2 | 5.5 | 5.8 | 6.5 | 6.7 | 6.8 | 7.3 | 0.5 | ▲ 0.9 |
| Implied Daily Storage Activity EIA Reported Daily Storage Activity Daily Model Error | 13.8 | 11.5 | -27.0 | -2.0 | 5.4 | 12.0 | 13.4 | | |

Source: Bloomberg, analytix.ai



Regional S/D Models Storage Projection

Week Ending 28-May

| | Daily Raw Storage | Daily Adjustment Factor | Daily Average Storage Activity (Adjusted) * | Weekly Adjusted Storage Activity |
|---------------|----------------------|-------------------------------|---|---|
| L48 | 12.9 | 1.4 | 14.3 | 100 |
| East | 3.3 | 0.8 | 4.1 | 29 |
| Midwest | 4.8 | -0.4 | 4.4 | 31 |
| Mountain | 4.3 | -3.2 | 1.0 | 7 |
| South Central | -1.2 | 4.6 | 3.4 | 24 |
| Pacific | 1.8 | -0.4 | 1.4 | 10 |

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

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



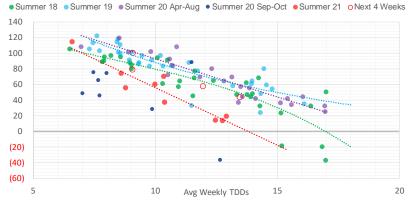


Weather Model Storage Projection

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

| Week Ending | GWDDs | Week Storage Projection |
|-------------|-------|----------------------------|
| 28-May | 9.1 | 100 |
| 04-Jun | 9.1 | 79 |
| 11-Jun | 13.5 | 44 |
| 18-Jun | 12.0 | 58 |

Weather Storage Model - Next 4 Week Forecast



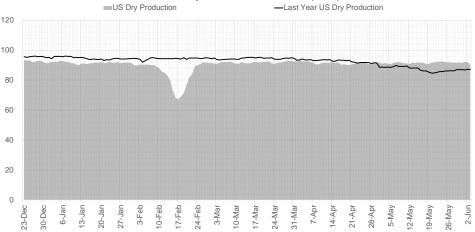
Go to larger image



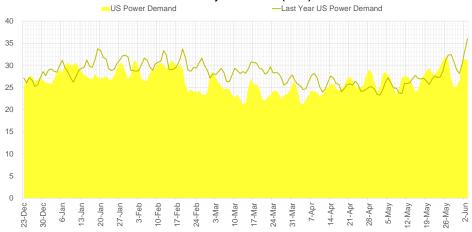


Supply - Demand Trends

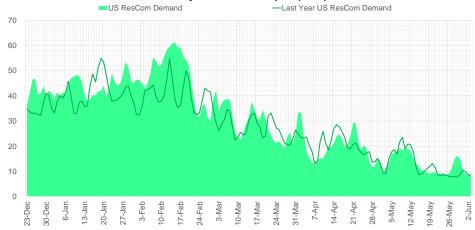
US Dry Natural Gas Production (Bcf/d)



US Daily Power Burns (Bcf/d)



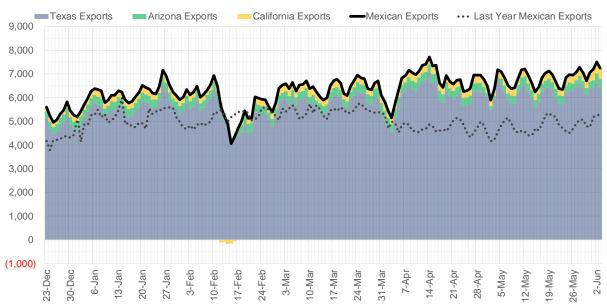
US Daily ResCom Consumption(Bcf/d)



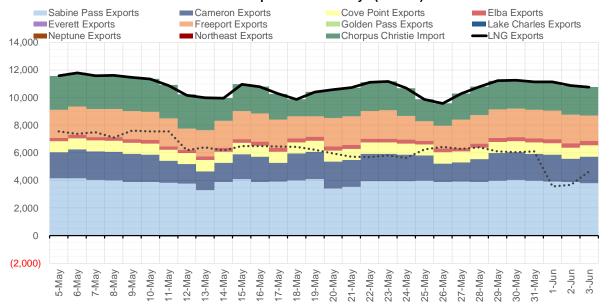
Source: Bloomberg



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

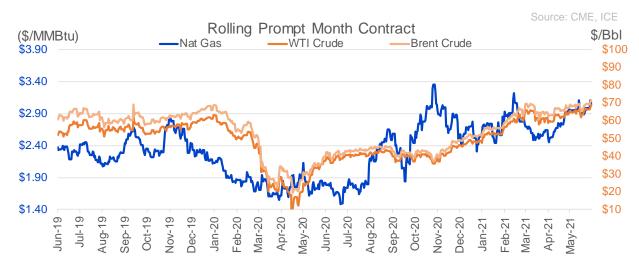
| CONTRACT MONTH | CONTRACT YEAR | PUT/CALL | STRIKE | CUMULATIVE VOL | CONTRACT MONTH | CONTRACT YEAR | PUT/CALL | STRIKE | CUMULATIVE OI |
|-------------------|------------------|----------|-------------------|-------------------|-------------------|------------------|-------------|--------------|----------------|
| | | | | | | 0004 | | 0.50 | 45470 |
| 7 | 2021 | P | 2.75 | 17467 | 8 | 2021 | С | 3.50 | 45179 |
| 7 | 2021 | P | 2.90 | 15887 | 10 | 2021 | С | 4.00 | 40578 |
| 7 | 2021 | Р | 2.50 | 8085 | 8 | 2021 | С | 3.25 | 33823 |
| 7 | 2021 | P | 2.80 | 6603 | 9 | 2021 | С | 4.00 | 33036 |
| 7 | 2021 | С | 3.15 | 6146 | 7 | 2021 | С | 3.50 | 30464 |
| 7 | 2021 | С | 3.50 | 5655 | 10 | 2021 | P | 2.50 | 30407 |
| 7 | 2021 | Р | 3.00 | 4831 | 10 | 2021 | С | 3.25 | 30322 |
| 8 | 2021 | С | 3.25 | 4005 | 7 | 2021 | С | 3.25 | 29404 |
| 7 | 2021 | С | 3.10 | 3759 | 7 | 2021 | P | 2.75 | 28307 |
| 7 | 2021 | С | 3.25 | 3233 | 10 | 2021 | С | 3.50 | 27546 |
| 7 | 2021 | Р | 2.65 | 3030 | 10 | 2021 | С | 5.00 | 27241 |
| 10 | 2021 | Р | 2.00 | 2960 | 7 | 2021 | P | 2.50 | 26755 |
| 10 | 2021 | С | 3.50 | 2956 | 7 | 2021 | С | 4.00 | 26126 |
| 8 | 2021 | Р | 2.80 | 2710 | 8 | 2021 | С | 4.00 | 25478 |
| 10 | 2021 | С | 3.75 | 2675 | 8 | 2021 | P | 2.50 | 25474 |
| 7 | 2021 | Р | 2.85 | 2580 | 9 | 2021 | C P | 3.50 | 23486 |
| 8 | 2021 | Р | 2.75 | 2550 | 10 | 2021 | | 2.00 | 22996 |
| 8 | 2021 | С | 3.50 | 2340 | 7 | 2021 | С | 3.75 | 22221 |
| 7 | 2021 | С | 3.35 | 2327 | 7 | 2021 | С | 3.00 | 22068 |
| 10 | 2021 | С | 3.25 | 1750 | 9 | 2021 | P | 2.50 | 21911 |
| 9 | 2021 | Р | 2.80 | 1700 | 12 | 2021 | С | 4.00 | 20874 |
| 8 | 2021 | С | 3.75 | 1584 | 9 | 2021 | P | 2.00 | 20423 |
| 9 | 2021 | С | 3.75 | 1575 | 7 | 2021 | P | 3.00 | 19785 |
| 10 | 2021 | Р | 2.80 | 1530 | 4 | 2022 | C P | 3.00 | 19735 |
| 9 | 2021 | С | 3.25 | 1500 | 8 | 2021 | | 2.00 | 19664 |
| 8 | 2021 | С | 4.00 | 1410 | 8 | 2021 | P | 2.25 | 19585 |
| 7 | 2021 | Р | 2.95 | 1266 | 9 | 2021 | С | 3.25 | 19533 |
| 7 | 2021 | Р | 3.10 | 1209 | 8 10 | 2021 | С | 3.75 | 18881 |
| 8 | 2021 | Р | 2.85 | 1109 | | 2021 | С | 3.00 | 18721 |
| 9 | 2021 | С | 4.00 | 1004 | 11 | 2021 | C P | 4.00 | 18162 |
| 10 | 2021 | P | 2.65 | 1000 | 10 | 2021 | | 2.25 | 17818 |
| 11 | 2021 | P | 2.75 | 1000 | 7 | 2021 | P | 2.80 | 17577 |
| 10 | 2021 | P | 2.25 | 925 | 3 7 | 2022 2021 | C P | 4.00 | 16900 |
| 7 | 2021 | C | 3.20 | 777 | 8 | 2021 | P P | 2.70 2.75 | 16655 16099 |
| 7 | 2021 | Č | 3.75 | 748 | 8 | 2021 2021 | C | | |
| 7 | 2021 | P | 2.70 | 688 | 8 7 | 2021 2021 | P | 3.00 | 16092 |
| 8 | 2021 | P | 2.50 | 651 | 10 | 2021 | P | 2.00 2.75 | 16035 15665 |
| 8 | 2021 | Р | 2.90 | 616 | 11 | 2021 | P | | 15467 |
| 9 | 2021 | P | 2.50 | 605 | 3 | 2021 | C | 2.50 3.00 | 14544 |
| 8 | 2021 | C | 3.70 | 600 | 3 | 2022 | C | 5.00 | 14200 |
| 8 | 2021 | Č | 3.15 | 595 | | | C | | |
| 10 | 2021 | P | 2.50 | 579 | 10 12 | 2021 2021 | P | 6.00 2.00 | 13996 13884 |
| 7 | 2021 | P | 2.60 | 537 | | | C | | |
| 7 | 2021 | C | 3.40 | 526 | 10 7 | 2021 2021 | P | 4.50 2.90 | 13870 13791 |
| 7 | 2021 | Č | 3.00 | 524 | 9 | | P P | | |
| 9 | 2021 | P | 2.75 | 501 | | 2021 | P P | 1.90 | 13732 |
| 2 | 2021 | P | 2.75 | 500 | 7 1 | 2021 2022 | C | 2.25 4.00 | 13530 13516 |
| 3 | 2022 | P | 2.50 | 500 | 5 | 2022 | C | 3.00 | 13395 |
| 3 7 | 2022 | C | 3.45 | 490 | 5 6 | 2022 | | | 13395 |
| , | ZUZ I | C | J. 4 U | 4 30 | О | 2022 | C Source | : CME, ICE | 13100 |



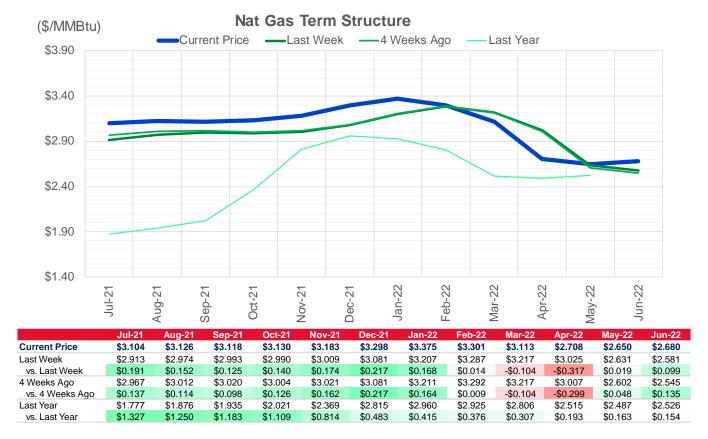
Nat Gas Futures Open Interest

CME, and ICE Combined

| CME Henry Hub Futures (10,000 MMBtu) ICE Henry Hub Futures Contract Equivalent (10,000 MI | | | | | | | |
|---|---------|--------|--------------|--------|---------|--------|--------------|
| | Current | Prior | Daily Change | | Current | Prior | Daily Change |
| JUL 21 | 302878 | 306589 | -3711 | JUL 21 | 99478 | 100457 | -979 |
| AUG 21 | 99985 | 95437 | 4548 | AUG 21 | 79334 | 80188 | -853 |
| SEP 21 | 151073 | 151245 | -172 | SEP 21 | 80845 | 79101 | 1744 |
| OCT 21 | 137951 | 138369 | -418 | OCT 21 | 92788 | 92671 | 118 |
| NOV 21 | 76517 | 75984 | 533 | NOV 21 | 70820 | 70611 | 210 |
| DEC 21 | 53258 | 53763 | -505 | DEC 21 | 65689 | 65632 | 58 |
| JAN 22 | 82413 | 82309 | 104 | JAN 22 | 71649 | 71280 | 369 |
| FEB 22 | 30856 | 31002 | -146 | FEB 22 | 58145 | 57799 | 346 |
| MAR 22 | 52862 | 53115 | -253 | MAR 22 | 60132 | 59543 | 589 |
| APR 22 | 62301 | 60996 | 1305 | APR 22 | 53619 | 53324 | 295 |
| MAY 22 | 40790 | 39896 | 894 | MAY 22 | 47964 | 47859 | 106 |
| JUN 22 | 21302 | 21349 | -47 | JUN 22 | 44782 | 44582 | 200 |
| JUL 22 | 12311 | 12303 | 8 | JUL 22 | 44950 | 44709 | 241 |
| AUG 22 | 11190 | 10909 | 281 | AUG 22 | 43114 | 42916 | 199 |
| SEP 22 | 12160 | 11430 | 730 | SEP 22 | 43838 | 43646 | 192 |
| OCT 22 | 30694 | 30775 | -81 | OCT 22 | 49455 | 49266 | 190 |
| NOV 22 | 12133 | 12001 | 132 | NOV 22 | 38642 | 38465 | 177 |
| DEC 22 | 11626 | 11465 | 161 | DEC 22 | 43264 | 43084 | 179 |
| JAN 23 | 5636 | 5634 | 2 | JAN 23 | 24587 | 24649 | -62 |
| FEB 23 | 2860 | 2860 | 0 | FEB 23 | 22521 | 22588 | -67 |
| MAR 23 | 6345 | 6042 | 303 | MAR 23 | 24756 | 24639 | 117 |
| APR 23 | 7307 | 6751 | 556 | APR 23 | 20616 | 20582 | 34 |
| MAY 23 | 4516 | 4501 | 15 | MAY 23 | 20238 | 20218 | 20 |
| JUN 23 | 968 | 968 | 0 | JUN 23 | 18770 | 18750 | 20 |
| JUL 23 | 1119 | 1118 | 1 | JUL 23 | 18686 | 18665 | 21 |
| AUG 23 | 812 | 831 | -19 | AUG 23 | 18769 | 18719 | 50 |
| SEP 23 | 778 | 778 | 0 | SEP 23 | 18221 | 18201 | 20 |
| OCT 23 | 1722 | 1722 | 0 | OCT 23 | 19040 | 19021 | 20 |
| NOV 23 | 684 | 684 | 0 | NOV 23 | 18432 | 18407 | 25 |
| DEC 23 | 1040 | 1040 | 0 | DEC 23 | 18965 | 18839 | 127 |







| | | Cash Prompt | | Cash to |
|-----------------------|----------|-------------|--------|---------|
| | Units | Settled | Settle | Prompt |
| AGT Citygate | \$/MMBtu | 2.45 | 2.45 | 0.00 |
| TETCO M3 | \$/MMBtu | 2.09 | 2.40 | 0.31 |
| FGT Zone 3 | \$/MMBtu | 2.20 | 3.04 | 0.84 |
| Zone 6 NY | \$/MMBtu | 2.20 | 2.41 | 0.21 |
| Chicago Citygate | \$/MMBtu | 2.94 | 2.89 | -0.05 |
| Michcon | \$/MMBtu | 2.92 | 2.87 | -0.05 |
| Columbia TCO Pool | \$/MMBtu | 2.55 | 2.55 | 0.00 |
| Ventura | \$/MMBtu | 2.66 | 2.75 | 0.09 |
| Rockies/Opal | \$/MMBtu | 3.03 | 2.82 | -0.21 |
| El Paso Permian Basin | \$/MMBtu | 2.85 | 2.80 | -0.05 |
| Socal Citygate | \$/MMBtu | 4.49 | 3.43 | -1.06 |
| Malin | \$/MMBtu | 3.10 | 3.00 | -0.10 |
| Houston Ship Channel | \$/MMBtu | 2.98 | 3.06 | 0.08 |
| Henry Hub Cash | \$/MMBtu | 3.04 | 2.83 | -0.22 |
| AECO Cash | C\$/GJ | 2.68 | 2.55 | -0.13 |
| Station2 Cash | C\$/GJ | 2.62 | 2.95 | 0.33 |
| Dawn Cash | C\$/GJ | 2.92 | 2.86 | -0.06 |

Source: CME, Bloomberg



| | | | | | VS | s. 4 Weeks | | |
|-------------------------|--------------|----------------------|-----|------------------|----|------------|----|--------------|
| | Units | Current Price | VS. | Last Week | | Ago | VS | s. Last Year |
| NatGas Jul21/Oct21 | \$/MMBtu | 0.027 | | -0.003 | | 0.014 | | 0.025 |
| NatGas Oct21/Nov21 | \$/MMBtu | 0.057 | • | -0.008 | • | -0.004 | | 0.012 |
| NatGas Oct21/Jan22 | \$/MMBtu | 0.258 | | -0.004 | | -0.011 | | -0.023 |
| NatGas Apr22/Oct22 | \$/MMBtu | 0.026 | | -0.007 | | 0.002 | | -0.032 |
| WTI Crude | \$/Bbl | 68.83 | | 2.620 | | 3.200 | | 31.540 |
| Brent Crude | \$/BbI | 71.35 | | 2.480 | | 2.390 | | 31.560 |
| Fuel Oil, NY Harbour 1% | \$/Bbl | 97.18 | | 0.000 | | 0.000 | | 0.000 |
| Heating Oil | cents/Gallon | 210.71 | | 6.190 | | 10.460 | | 104.250 |
| Propane, Mt. Bel | cents/Gallon | 0.92 | | 0.093 | | 0.096 | | 0.420 |
| Ethane, Mt. Bel | cents/Gallon | 0.27 | | 0.007 | | 0.012 | | 0.021 |
| 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 | | | | | | |



Weather Storage Model - Next 4 Week Forecast

