

| | Current | Δ from YD | Δ from 7D Avg |
|----------------|---------|-----------|---------------|
| Nat Gas Prompt | \$ 3.91 | ▲ \$ 0.11 | ▲ \$ 0.06 |

| | Current | Δ from YD | Δ from 7D Avg |
|------------|----------|-----------|---------------|
| WTI Prompt | \$ 71.16 | ▲ \$ 0.29 | ▼ \$ (0.1) |

| | Current | Δ from YD | Δ from 7D Avg |
|--------------|----------|-----------|---------------|
| Brent Prompt | \$ 74.20 | ▲ \$ 0.32 | ▼ \$ (0.3) |

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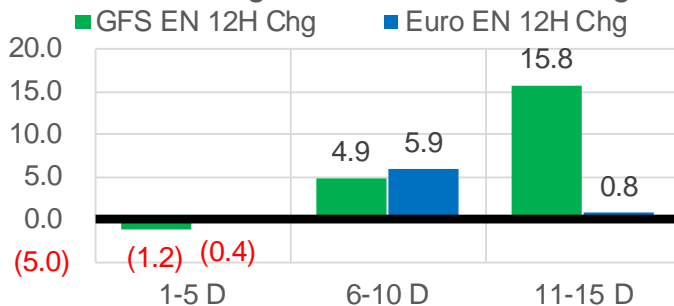
[Nat Gas Options Volume and Open Interest](#)

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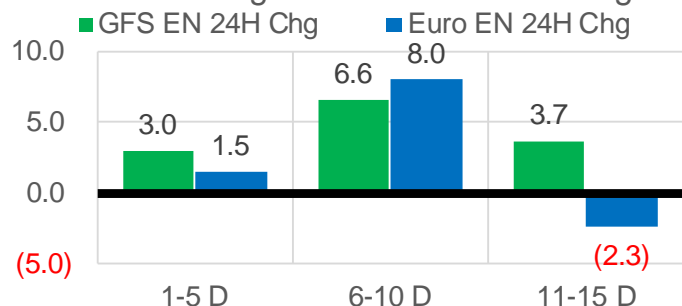
Vs. 12H Ago

L48 Region - 00z TDD vs 12H Ago



Vs. 24H Ago

L48 Region - 00z TDD vs 24H Ago



| | Current | Δ from YD | Δ from 7D Avg |
|-------------------|---------|-----------|---------------|
| US Dry Production | 95.9 | ▼ -0.59 | ▼ -0.59 |

| | Current | Δ from YD | Δ from 7D Avg |
|----------------|---------|-----------|---------------|
| US Power Burns | 27.4 | ▼ -0.58 | ▼ -1.33 |

| | Current | Δ from YD | Δ from 7D Avg |
|------------|---------|-----------|---------------|
| US ResComm | 26.7 | ▼ -0.69 | ▼ -6.17 |

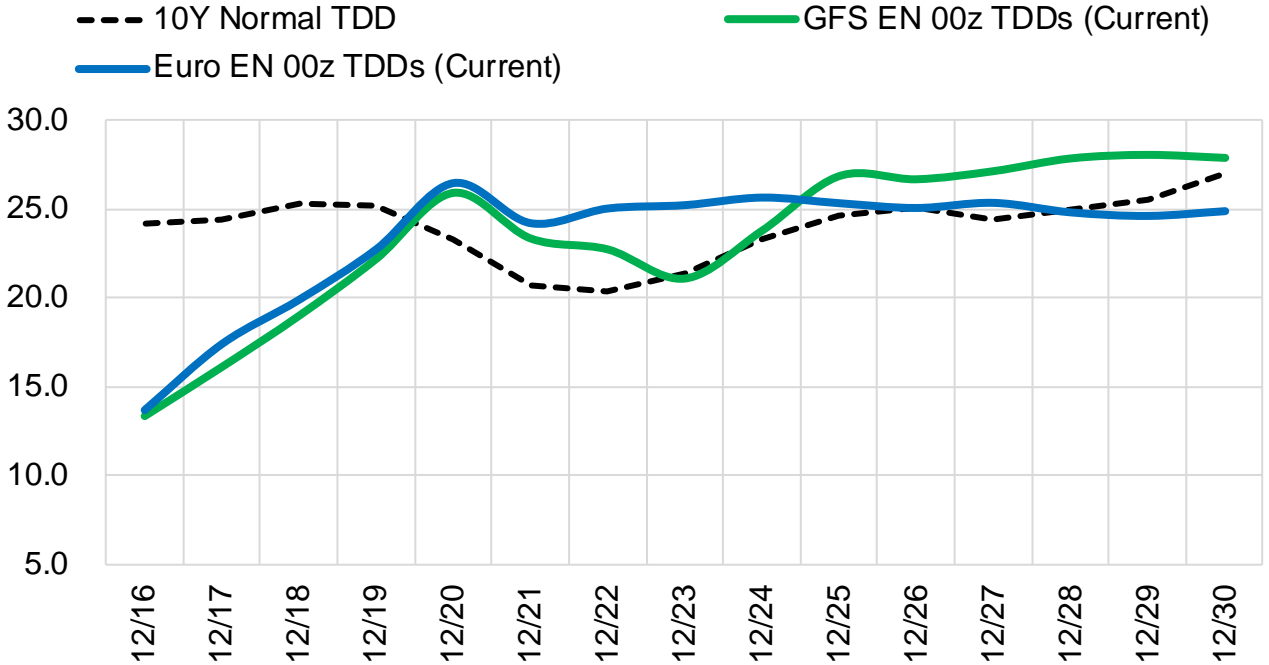
| | Current | Δ from YD | Δ from 7D Avg |
|------------------|---------|-----------|---------------|
| Canadian Imports | 3.8 | ▼ -0.41 | ▼ -1.01 |

| | Current | Δ from YD | Δ from 7D Avg |
|-----------------|---------|-----------|---------------|
| Net LNG Exports | 12.0 | ▲ 0.56 | ▲ 0.15 |

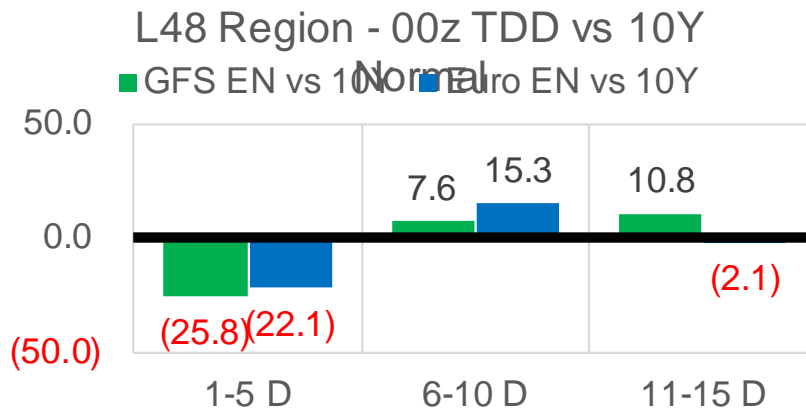
| | Current | Δ from YD | Δ from 7D Avg |
|-----------------|---------|-----------|---------------|
| Mexican Exports | 6.1 | ▼ -0.19 | ▲ 0.02 |

Short-term Weather Model Outlooks (00z)

L48 Region



Vs. 10Y Normal



Source: WSI , Bloomberg

Lower 48 Component Models

Daily Balances

| | 10-Dec | 11-Dec | 12-Dec | 13-Dec | 14-Dec | 15-Dec | 16-Dec | DoD | vs. 7D |
|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------|--------|
| Lower 48 Dry Production | 97.0 | 96.2 | 96.5 | 96.0 | 96.0 | 96.5 | 95.9 | ▼ -0.6 | ▼ -0.5 |
| Canadian Imports | 4.7 | 4.6 | 4.8 | 4.9 | 4.9 | 4.2 | 3.8 | ▼ -0.4 | ▼ -0.9 |
| L48 Power | 28.1 | 27.1 | 27.8 | 29.9 | 29.4 | 28.0 | 27.4 | ▼ -0.6 | ▼ -1.0 |
| L48 Residential & Commercial | 31.5 | 30.0 | 36.5 | 34.9 | 32.3 | 27.4 | 26.7 | ▼ -0.7 | ▼ -5.4 |
| L48 Industrial | 23.3 | 23.3 | 23.7 | 23.6 | 23.3 | 22.7 | 22.7 | ▲ 0.1 | ▼ -0.6 |
| L48 Lease and Plant Fuel | 5.3 | 5.2 | 5.2 | 5.2 | 5.2 | 5.2 | 5.2 | ▼ -0.1 | ▼ -0.1 |
| L48 Pipeline Distribution | 3.0 | 2.9 | 3.2 | 3.2 | 3.1 | 2.8 | 2.7 | ▼ -0.1 | ▼ -0.3 |
| L48 Regional Gas Consumption | 91.2 | 88.5 | 96.4 | 96.8 | 93.4 | 86.0 | 84.7 | ▼ -1.3 | ▼ -7.4 |
| Net LNG Delivered | 11.82 | 12.24 | 12.44 | 11.82 | 11.29 | 11.41 | 11.97 | ▲ 0.6 | ▲ 0.1 |
| Total Mexican Exports | 6.2 | 6.0 | 5.8 | 5.5 | 6.2 | 6.3 | 6.1 | ▼ -0.2 | ▲ 0.1 |
| Implied Daily Storage Activity | -7.5 | -5.9 | -13.4 | -13.3 | -9.9 | -3.0 | -3.1 | | |
| EIA Reported Daily Storage Activity | | | | | | | | | |
| Daily Model Error | | | | | | | | | |

EIA Storage Week Balances

| | 5-Nov | 12-Nov | 19-Nov | 26-Nov | 3-Dec | 10-Dec | WoW | vs. 4W |
|--|-------------|-------------|-------------|-------------|-------------|--------------|-------------|--------|
| Lower 48 Dry Production | 95.1 | 95.9 | 95.1 | 96.2 | 96.9 | 96.8 | ▼ -0.1 | ▲ 0.7 |
| Canadian Imports | 5.5 | 5.1 | 4.9 | 5.5 | 5.6 | 5.3 | ▼ -0.3 | ▲ 0.0 |
| L48 Power | 29.6 | 27.5 | 27.8 | 29.2 | 28.8 | 29.1 | ▲ 0.3 | ▲ 0.8 |
| L48 Residential & Commercial | 24.3 | 23.6 | 28.0 | 33.3 | 33.3 | 35.6 | ▲ 2.3 | ▲ 6.0 |
| L48 Industrial | 21.2 | 21.4 | 23.1 | 22.4 | 22.5 | 24.2 | ▲ 1.7 | ▲ 1.9 |
| L48 Lease and Plant Fuel | 5.2 | 5.2 | 5.2 | 5.2 | 5.3 | 5.2 | ▼ 0.0 | ▲ 0.0 |
| L48 Pipeline Distribution | 2.9 | 2.7 | 3.0 | 3.3 | 3.3 | 3.2 | ▼ 0.0 | ▲ 0.2 |
| L48 Regional Gas Consumption | 83.2 | 80.3 | 87.0 | 93.5 | 93.1 | 97.4 | ▲ 4.3 | ▲ 8.9 |
| Net LNG Exports | 10.9 | 11.2 | 11.1 | 11.7 | 11.8 | 12.0 | ▲ 0.2 | ▲ 0.6 |
| Total Mexican Exports | 6.1 | 6.2 | 6.0 | 6.0 | 6.4 | 6.4 | ▼ 0.0 | ▲ 0.2 |
| Implied Daily Storage Activity | 0.4 | 3.2 | -4.2 | -9.6 | -8.8 | -13.8 | -5.0 | |
| EIA Reported Daily Storage Activity | 1.0 | 3.7 | -3.0 | -8.4 | -8.4 | | | |
| Daily Model Error | -0.6 | -0.5 | -1.2 | -1.1 | -0.4 | | | |

Monthly Balances

| | 2Yr Ago Dec-19 | LY Dec-20 | Aug-21 | Sep-21 | Oct-21 | Nov-21 | MTD Dec-21 | MoM | vs. LY |
|--|-------------------|--------------|-------------|-------------|-------------|-------------|---------------|--------|--------|
| Lower 48 Dry Production | 95.9 | 91.6 | 94.0 | 93.4 | 94.0 | 95.9 | 96.5 | ▲ 0.6 | ▲ 4.9 |
| Canadian Imports | 4.5 | 5.8 | 5.1 | 5.1 | 5.4 | 5.3 | 5.0 | ▼ -0.3 | ▼ -0.8 |
| L48 Power | 29.3 | 28.0 | 40.1 | 33.0 | 30.2 | 28.8 | 28.7 | ▼ 0.0 | ▲ 0.8 |
| L48 Residential & Commercial | 39.1 | 40.3 | 7.9 | 8.7 | 13.2 | 29.6 | 33.1 | ▲ 3.5 | ▼ -7.2 |
| L48 Industrial | 24.6 | 23.4 | 21.5 | 20.3 | 20.3 | 22.3 | 23.6 | ▲ 1.3 | ▲ 0.2 |
| L48 Lease and Plant Fuel | 5.2 | 5.0 | 5.1 | 5.1 | 5.1 | 5.2 | 5.2 | ▲ 0.0 | ▲ 0.3 |
| L48 Pipeline Distribution | 3.4 | 3.4 | 2.6 | 2.3 | 2.3 | 3.1 | 3.1 | ▼ 0.0 | ▼ -0.3 |
| L48 Regional Gas Consumption | 101.6 | 100.0 | 77.2 | 69.4 | 71.3 | 88.9 | 93.7 | ▲ 4.7 | ▼ -6.3 |
| Net LNG Exports | 7.8 | 11.0 | 10.5 | 10.3 | 10.6 | 11.4 | 11.8 | ▲ 0.5 | ▲ 0.9 |
| Total Mexican Exports | 4.9 | 5.8 | 6.9 | 6.7 | 6.6 | 6.1 | 6.3 | ▲ 0.2 | ▲ 0.5 |
| Implied Daily Storage Activity | -13.8 | -19.5 | 4.6 | 12.1 | 10.9 | -5.3 | -10.3 | | |
| EIA Reported Daily Storage Activity | | | | | | | | | |
| Daily Model Error | | | | | | | | | |

Source: Bloomberg, analytix.ai

Daily Average Generation Data

Nuclear Generation Daily Average - GWh (NRC)

| | 8-Dec | 9-Dec | 10-Dec | 11-Dec | 12-Dec | 13-Dec | 14-Dec | DoD | vs. 7D |
|-------------------------------|-------|-------|--------|--------|--------|--------|--------|------|--------|
| NRC Nuclear Daily Output | 88.5 | 89.0 | 88.0 | 87.7 | 88.6 | 90.4 | 91.5 | 1.1 | 2.8 |
| 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 | 16.4 | 15.9 | 16.9 | 17.1 | 16.3 | 14.5 | 13.4 | -1.1 | -2.8 |
| NRC % Nuclear Cap Utilization | 90.0 | 90.5 | 89.4 | 89.2 | 90.1 | 91.9 | 93.0 | 1.1 | 2.8 |

Wind Generation Daily Average - MWh (EIA)

| | 8-Dec | 9-Dec | 10-Dec | 11-Dec | 12-Dec | 13-Dec | 14-Dec | DoD | vs. 7D |
|------------|-------|-------|--------|--------|--------|--------|--------|-------|--------|
| CALI Wind | 1471 | 3273 | 1265 | 534 | 1183 | 2594 | 3065 | 471 | 1345 |
| TEXAS Wind | 8254 | 16815 | 19964 | 12023 | 16870 | 14446 | 17778 | 3331 | 3049 |
| US Wind | 42390 | 65750 | 70856 | 67833 | 76589 | 56970 | 69287 | 12316 | 5888 |

Generation Daily Average - MWh (EIA)

| | 8-Dec | 9-Dec | 10-Dec | 11-Dec | 12-Dec | 13-Dec | 14-Dec | DoD | vs. 7D |
|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|--------------|
| US Wind | 42390 | 65750 | 70856 | 67833 | 76589 | 56970 | 69287 | 12316 | 5888 |
| US Solar | 6879 | 7643 | 6956 | 8739 | 9182 | 7086 | 6029 | -1057 | -1718 |
| US Petroleum | 4572 | 3225 | 2990 | 2413 | 2208 | 3295 | 2743 | -552 | -374 |
| US Other | 8584 | 8500 | 8450 | 8108 | 8077 | 8679 | 8336 | -342 | -63 |
| US Coal | 90260 | 86635 | 76804 | 71574 | 71292 | 85168 | 82852 | -2316 | 2563 |
| US Nuke | 93999 | 93844 | 92063 | 92253 | 93982 | 95984 | 96938 | 954 | 3250 |
| US Hydro | 31018 | 31880 | 31008 | 28254 | 28388 | 31996 | 30607 | -1389 | 183 |
| US Gas | 181097 | 168159 | 155367 | 134624 | 134090 | 164277 | 152034 | -12243 | -4235 |

See National Wind and Nuclear daily charts

Source: Bloomberg, analytix.ai

Storage Week Average Generation Data

Nuclear Generation Weekly Average - GWh (NRC)

| | 5-Nov | 12-Nov | 19-Nov | 26-Nov | 3-Dec | 10-Dec | WoW | WoW Bcf/d Impact |
|-------------------------------|-------|--------|--------|--------|-------|--------|------|------------------|
| NRC Nuclear Daily Output | 72.2 | 79.8 | 83.9 | 86.1 | 87.8 | 88.0 | 0.2 | 0.0 |
| NRC Nuclear Max Capacity | 104.9 | 104.9 | 104.9 | 104.9 | 104.9 | 104.9 | 0.0 | |
| NRC Nuclear Outage | 32.7 | 25.1 | 21.0 | 18.8 | 17.1 | 16.9 | -0.2 | |
| NRC % Nuclear Cap Utilization | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | |

Wind Generation Weekly Average - MWh (EIA)

| | 5-Nov | 12-Nov | 19-Nov | 26-Nov | 3-Dec | 10-Dec | WoW | WoW Bcf/d Impact |
|------------|-------|--------|--------|--------|---------|--------|------|------------------|
| CALI Wind | 1669 | 1805 | 862 | 1496 | 363 | 1263 | 901 | -0.2 |
| TEXAS Wind | 8472 | 12032 | 13655 | 14691 | 8733 | 12216 | 3483 | -0.6 |
| US Wind | 35306 | 51002 | 58367 | 56260 | 47212 | 51469 | 4257 | -0.8 |
| | | | | | -9047.9 | | | |
| | | | | | -16% | | | |

Generation Weekly Average - MWh (EIA)

| | 5-Nov | 12-Nov | 19-Nov | 26-Nov | 3-Dec | 10-Dec | WoW | WoW Bcf/d Impact |
|---------------|---------------|---------------|---------------|---------------|---------------|---------------|-------------|------------------|
| US Wind | 35306 | 51002 | 58367 | 56260 | 47212 | 51469 | 4257 | -0.8 |
| US Solar | 9994 | 10015 | 10068 | 9086 | 9918 | 7941 | -1977 | 0.4 |
| US Petroleum | 3517 | 2532 | 2555 | 3342 | 3166 | 3441 | 274 | 0.0 |
| US Other | 9302 | 8205 | 7849 | 8442 | 8483 | 8384 | -98 | 0.0 |
| US Coal | 80024 | 77955 | 77863 | 82301 | 82273 | 82638 | 365 | -0.1 |
| US Nuke | 76091 | 84337 | 88331 | 91252 | 92816 | 92927 | 111 | 0.0 |
| US Hydro | 25818 | 25422 | 26206 | 27837 | 26777 | 29620 | 2843 | -0.5 |
| US Gas | 160442 | 145215 | 145263 | 148208 | 155282 | 159196 | 3913 | -0.7 |

See National Wind and Nuclear daily charts

Source: Bloomberg, analytix.ai

Monthly Average Generation Data

Nuclear Generation Monthly Average - GWh (NRC)

| | 2Yr Ago | LY | MTD | | | | | | |
|-------------------------------|--------------------------|--------------|--------|--------|--------|--------|--------------|-----------------|------------------|
| | Same 30 days | Same 30 days | Sep-21 | Oct-21 | Nov-21 | Dec-21 | Last 30 days | MoM (MTD vs LY) | Last 30 days YoY |
| | NRC Nuclear Daily Output | 90.5 | 87.2 | 87.1 | 75.5 | 82.7 | 88.7 | 87.8 | 6.0 |
| 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 | 14.4 | 17.7 | 17.8 | 29.4 | 22.2 | 16.2 | 17.1 | -6.0 | -0.6 |
| NRC % Nuclear Cap Utilization | 92.0 | 88.7 | 88.6 | 76.8 | 84.1 | 90.2 | 89.2 | 6.1 | 0.6 |

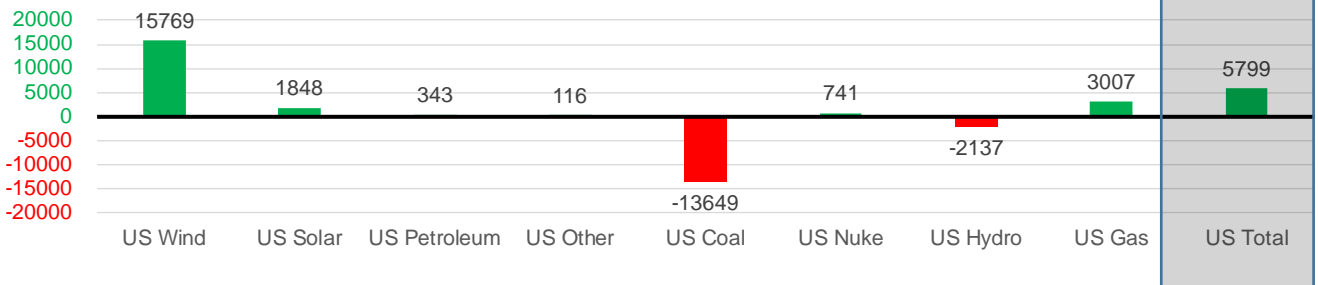
Wind Generation Monthly Average - MWh (EIA)

| | 2Yr Ago | LY | MTD | | | | | | |
|------------|--------------|--------------|--------|--------|--------|--------|--------------|-----------------|------------------|
| | Same 30 days | Same 30 days | Sep-21 | Oct-21 | Nov-21 | Dec-21 | Last 30 days | MoM (MTD vs LY) | Last 30 days YoY |
| | CALI Wind | 1077 | 1184 | 1964 | 1765 | 1252 | 1515 | 1265 | 263 |
| TEXAS Wind | 9112 | 10073 | 9213 | 11565 | 11869 | 13499 | 13284 | 1630 | 3211 |
| US Wind | 38177 | 40633 | 39362 | 43142 | 49974 | 58337 | 56401 | 8363 | 15769 |

Generation Monthly Average - MWh (EIA)

| | 2Yr Ago | LY | MTD | | | | | | |
|-----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|-----------------|------------------|
| | Same 30 days | Same 30 days | Sep-21 | Oct-21 | Nov-21 | Dec-21 | Last 30 days | MoM (MTD vs LY) | Last 30 days YoY |
| | US Wind | 38177 | 40633 | 39362 | 43142 | 49974 | 58337 | 56401 | ▼-1936.0 |
| US Solar | 4435 | 6734 | 13345 | 11059 | 9690 | 7827 | 8582 | ▲755.4 | ▲1848 |
| US Petroleum | 2449 | 2782 | 2517 | 3239 | 3045 | 3030 | 3125 | ▲95 | ▲343 |
| US Other | 7921 | 8262 | 9021 | 11109 | 8435 | 8390 | 8379 | ▼-12 | ▲116 |
| US Coal | 96850 | 94886 | 109915 | 84433 | 80848 | 80810 | 81237 | ▲428 | ▼-13649 |
| US Nuke | 97566 | 92016 | 90072 | 77089 | 87404 | 93689 | 92757 | ▼-933 | ▲741 |
| US Hydro | 28405 | 30674 | 25622 | 24078 | 26590 | 29630 | 28538 | ▼-1092 | ▼-2137 |
| US Gas | 152064 | 149420 | 173566 | 159045 | 151462 | 154949 | 152428 | ▼-2694 | ▲3007 |
| US Total | 427961 | 425807 | 463578 | 413350 | 417923 | 436584 | 431607 | ▼-3453 | ▲5799 |

Last 30 days YoY



See National Wind and Nuclear daily charts

Source: Bloomberg, analytix.ai

Regional S/D Models Storage Projection

Week Ending 10-Dec

| | Daily Raw Storage | Daily Adjustment Factor | Daily Average Storage Activity (Adjusted) * | Weekly Adjusted Storage Activity |
|---------------|-------------------|-------------------------|---|----------------------------------|
| L48 | -14.0 | 1.0 | -13.0 | -91 |
| East | -6.5 | 1.8 | -4.7 | -33 |
| Midwest | -5.4 | 0.2 | -5.3 | -37 |
| Mountain | 2.2 | -3.5 | -1.2 | -9 |
| South Central | -4.4 | 2.8 | -1.6 | -11 |
| Pacific | 0.0 | -0.3 | -0.3 | -2 |

*Adjustment Factor is calculated based on historical regional deltas

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

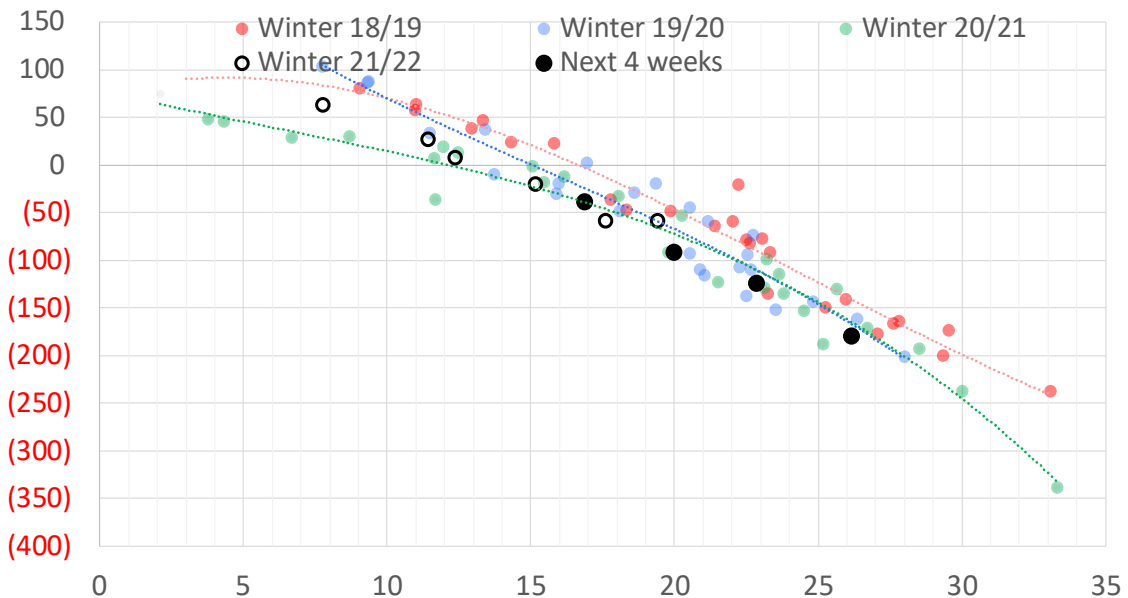


Weather Model Storage Projection

Next report
and beyond

| Week Ending | GWDDs | Week Storage Projection |
|-------------|-------|-------------------------|
| 10-Dec | 20 | -91 |
| 17-Dec | 17 | -38 |
| 24-Dec | 23 | -124 |
| 31-Dec | 26 | -178 |

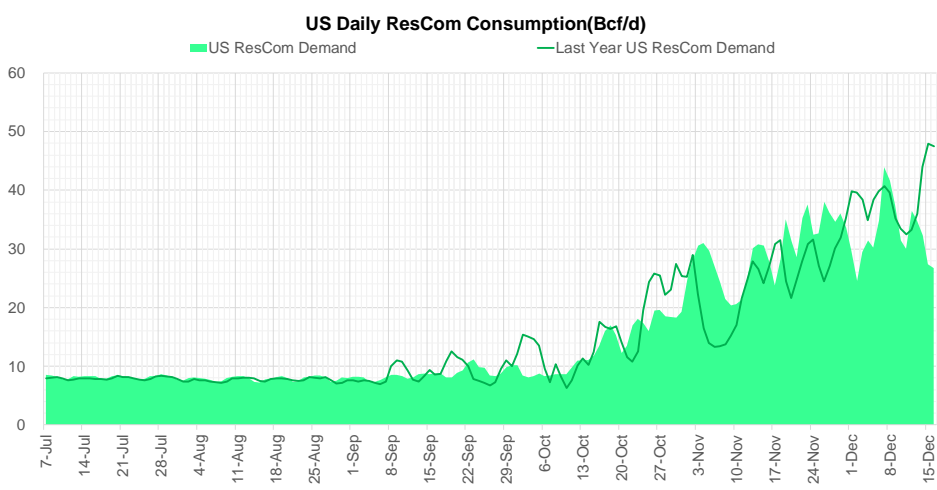
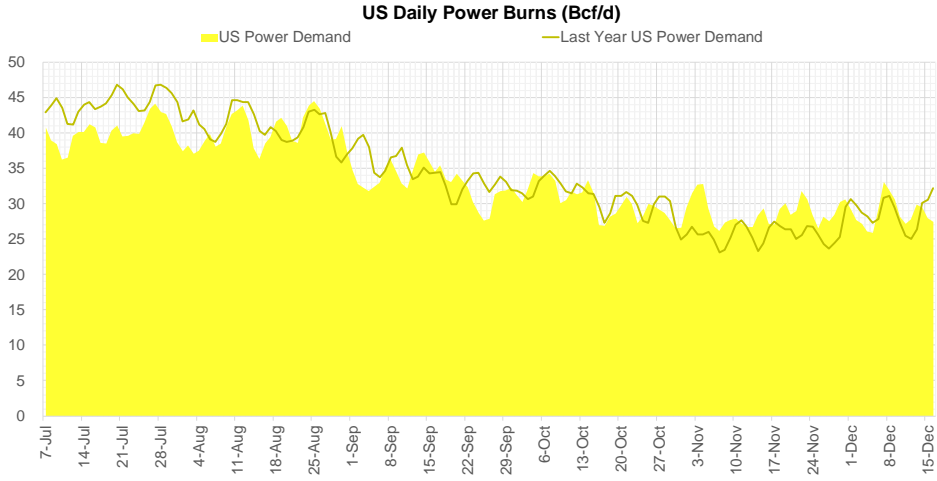
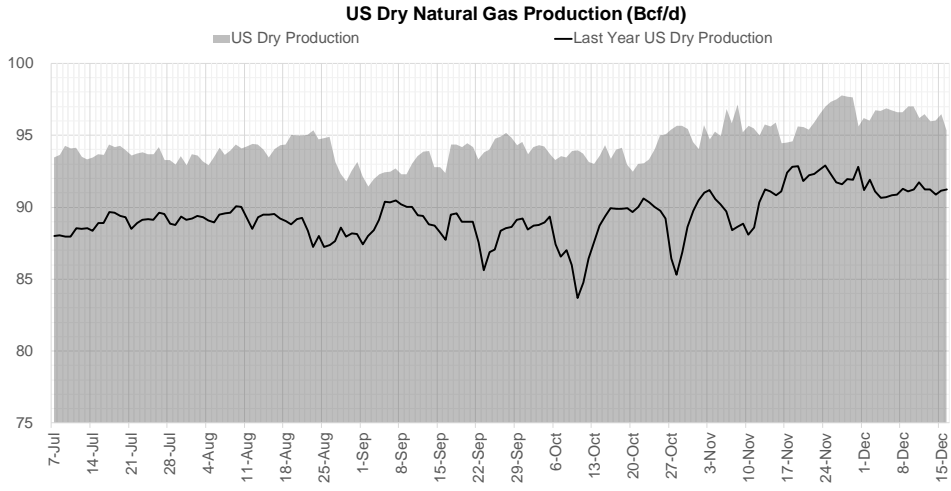
Weather Storage Model - Next 4 Week Forecast



Go to larger image

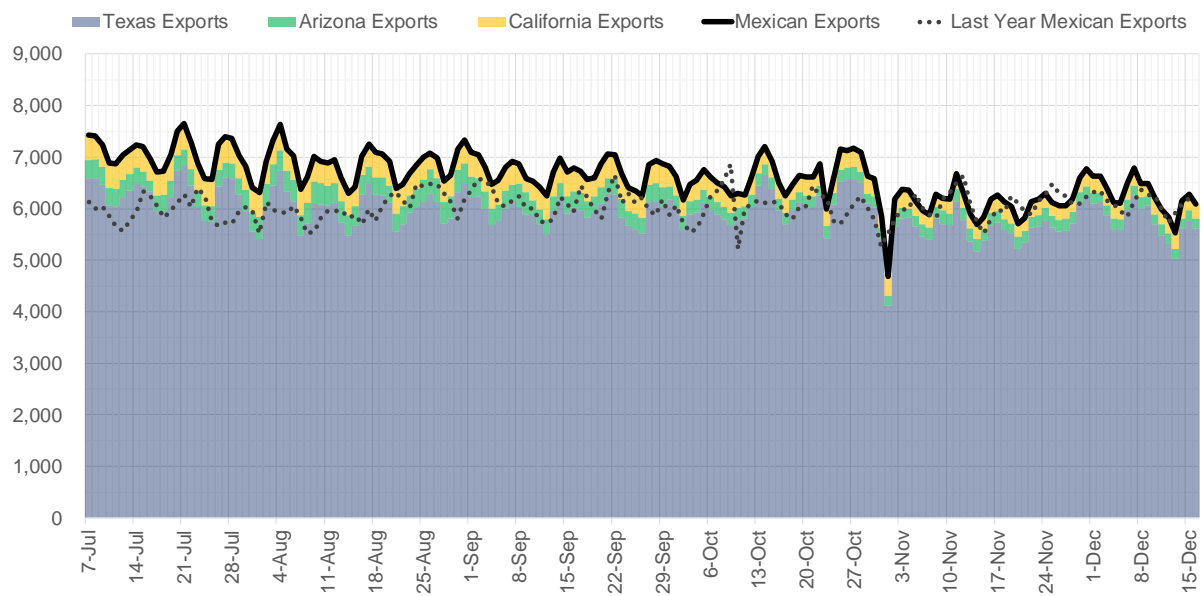


Supply – Demand Trends

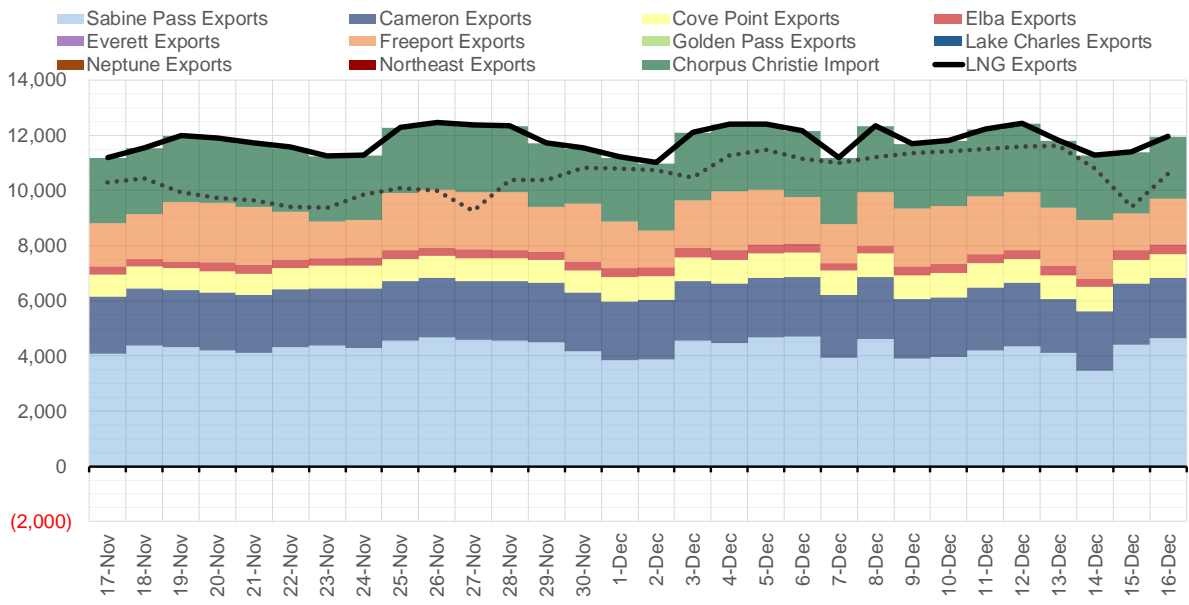


Source: Bloomberg

Mexican Exports (MMcf/d)



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



Source: Bloomberg

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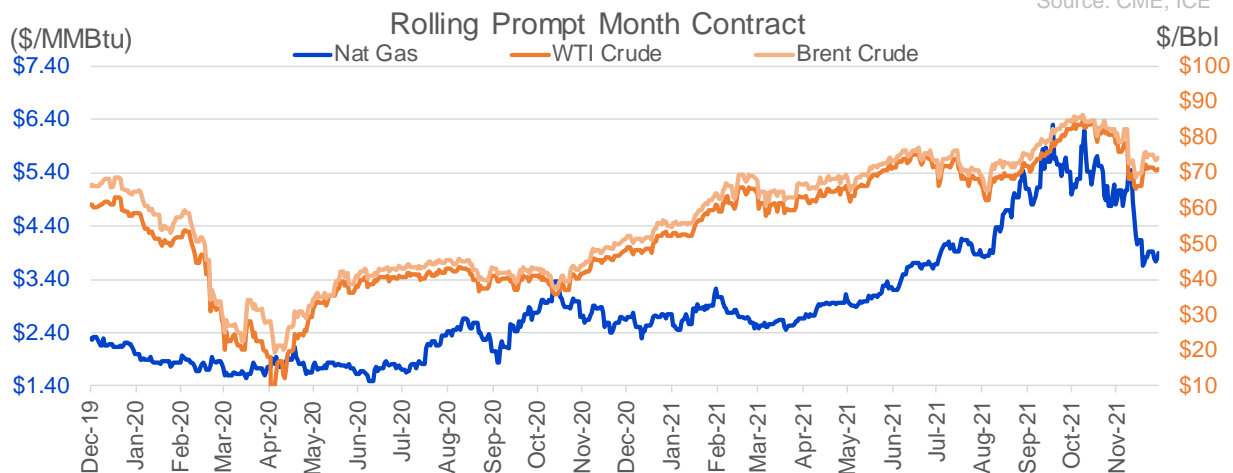
Nat Gas Options Volume and Open Interest CME, ICE and Nasdaq Combined

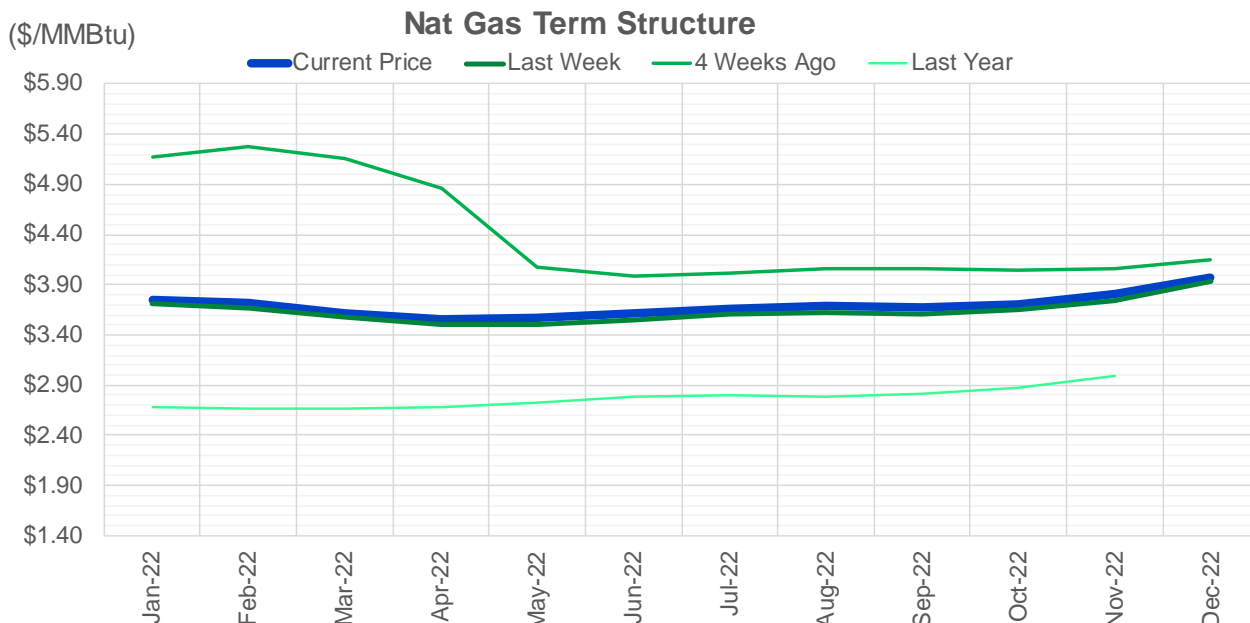
| CONTRACT MONTH | CONTRACT YEAR | PUT/CALL | STRIKE | CUMULATIVE VOL | CONTRACT MONTH | CONTRACT YEAR | PUT/CALL | STRIKE | CUMULATIVE OI |
|----------------|---------------|----------|--------|----------------|----------------|---------------|----------|--------|---------------|
| 10 | 2022 | C | 6.00 | 10900 | 3 | 2022 | C | 10.00 | 36579 |
| 10 | 2022 | C | 5.00 | 5200 | 1 | 2022 | C | 4.00 | 29055 |
| 1 | 2022 | P | 3.75 | 4509 | 1 | 2022 | P | 3.00 | 27273 |
| 1 | 2022 | C | 4.00 | 3119 | 1 | 2022 | P | 4.00 | 27245 |
| 1 | 2022 | C | 4.50 | 3066 | 3 | 2022 | C | 8.00 | 25855 |
| 4 | 2022 | P | 2.15 | 2500 | 1 | 2022 | C | 5.00 | 24979 |
| 5 | 2022 | P | 2.15 | 2500 | 3 | 2022 | C | 5.00 | 24506 |
| 6 | 2022 | P | 2.15 | 2500 | 1 | 2022 | P | 2.75 | 23364 |
| 7 | 2022 | P | 2.15 | 2500 | 1 | 2022 | C | 6.00 | 23061 |
| 8 | 2022 | P | 2.15 | 2500 | 2 | 2022 | C | 5.00 | 22765 |
| 9 | 2022 | P | 2.15 | 2500 | 3 | 2022 | C | 6.00 | 20903 |
| 10 | 2022 | P | 2.15 | 2500 | 1 | 2022 | P | 3.50 | 20737 |
| 1 | 2022 | C | 4.25 | 2150 | 4 | 2022 | C | 5.00 | 20350 |
| 1 | 2022 | C | 5.00 | 1654 | 12 | 2022 | C | 5.00 | 20297 |
| 1 | 2022 | P | 4.00 | 971 | 3 | 2022 | P | 2.50 | 20175 |
| 1 | 2022 | P | 3.50 | 922 | 4 | 2022 | C | 3.00 | 19710 |
| 3 | 2022 | C | 5.00 | 851 | 3 | 2022 | C | 4.00 | 18366 |
| 2 | 2022 | C | 5.00 | 841 | 1 | 2022 | C | 10.00 | 18356 |
| 1 | 2022 | C | 4.75 | 786 | 1 | 2022 | C | 4.50 | 18297 |
| 2 | 2022 | P | 3.50 | 724 | 1 | 2022 | C | 7.00 | 17695 |
| 3 | 2022 | P | 3.25 | 699 | 2 | 2022 | C | 6.00 | 17517 |
| 3 | 2022 | C | 6.00 | 682 | 1 | 2022 | P | 3.25 | 17456 |
| 3 | 2022 | C | 4.00 | 673 | 3 | 2022 | P | 4.00 | 17428 |
| 3 | 2022 | P | 3.00 | 670 | 2 | 2022 | C | 4.00 | 17387 |
| 1 | 2022 | P | 3.85 | 653 | 3 | 2022 | P | 3.00 | 17357 |
| 2 | 2022 | C | 3.75 | 629 | 2 | 2022 | P | 3.50 | 17321 |
| 1 | 2022 | C | 4.10 | 624 | 3 | 2022 | P | 3.50 | 17282 |
| 2 | 2022 | C | 7.00 | 620 | 2 | 2022 | P | 4.00 | 15791 |
| 2 | 2022 | C | 3.25 | 600 | 5 | 2022 | C | 5.00 | 15498 |
| 1 | 2022 | P | 3.60 | 588 | 4 | 2022 | P | 2.50 | 15492 |
| 1 | 2022 | C | 4.20 | 561 | 3 | 2022 | C | 7.00 | 15462 |
| 1 | 2022 | P | 3.70 | 512 | 6 | 2022 | C | 5.00 | 15392 |
| 1 | 2022 | C | 3.50 | 500 | 2 | 2022 | P | 3.00 | 13814 |
| 3 | 2023 | P | 2.75 | 500 | 2 | 2022 | C | 5.50 | 13783 |
| 4 | 2023 | P | 2.75 | 500 | 5 | 2022 | C | 3.00 | 13733 |
| 3 | 2022 | C | 10.00 | 430 | 2 | 2022 | C | 10.00 | 13728 |
| 10 | 2022 | P | 3.00 | 430 | 3 | 2022 | P | 5.00 | 13507 |
| 2 | 2022 | C | 4.50 | 403 | 1 | 2022 | C | 8.00 | 13480 |
| 1 | 2022 | C | 3.75 | 389 | 6 | 2022 | C | 3.00 | 13438 |
| 3 | 2022 | P | 4.00 | 316 | 10 | 2022 | P | 2.00 | 13297 |
| 4 | 2022 | P | 4.00 | 300 | 12 | 2022 | C | 4.50 | 13274 |
| 1 | 2022 | P | 3.35 | 255 | 7 | 2022 | C | 3.00 | 13230 |
| 1 | 2022 | C | 4.35 | 253 | 8 | 2022 | C | 3.00 | 13226 |
| 2 | 2022 | C | 30.00 | 250 | 9 | 2022 | C | 3.00 | 13225 |
| 4 | 2022 | C | 4.25 | 250 | 3 | 2022 | C | 3.00 | 13178 |
| 5 | 2022 | C | 4.25 | 250 | 8 | 2022 | C | 5.00 | 13168 |
| 2 | 2022 | C | 6.00 | 249 | 10 | 2022 | C | 3.00 | 13114 |
| 2 | 2022 | P | 3.75 | 246 | 12 | 2022 | C | 5.25 | 13113 |
| 2 | 2022 | C | 5.25 | 230 | 1 | 2022 | C | 6.10 | 12986 |
| | | | | | 2 | 2022 | C | 4.5 | 12948.25 |

Source: CME, ICE

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 | | | |
|--------------------------------------|---------|--------|--------------|--|---------|-------|--------------|
| | Current | Prior | Daily Change | | Current | Prior | Daily Change |
| JAN 22 | 85663 | 93096 | -7433 | JAN 22 | 93109 | 93486 | -376 |
| FEB 22 | 107858 | 101530 | 6328 | FEB 22 | 75904 | 75718 | 187 |
| MAR 22 | 244566 | 240022 | 4544 | MAR 22 | 89843 | 89731 | 112 |
| APR 22 | 85229 | 84793 | 436 | APR 22 | 71882 | 71959 | -77 |
| MAY 22 | 114401 | 114063 | 338 | MAY 22 | 70959 | 70909 | 50 |
| JUN 22 | 51323 | 50525 | 798 | JUN 22 | 54757 | 53854 | 903 |
| JUL 22 | 40611 | 40312 | 299 | JUL 22 | 58492 | 58268 | 224 |
| AUG 22 | 32582 | 32443 | 139 | AUG 22 | 55190 | 55040 | 150 |
| SEP 22 | 45475 | 46192 | -717 | SEP 22 | 56380 | 56259 | 121 |
| OCT 22 | 75231 | 75475 | -244 | OCT 22 | 64213 | 63904 | 309 |
| NOV 22 | 35118 | 35016 | 102 | NOV 22 | 50400 | 50330 | 70 |
| DEC 22 | 33000 | 32751 | 249 | DEC 22 | 58422 | 58328 | 94 |
| JAN 23 | 40528 | 40764 | -236 | JAN 23 | 46049 | 46137 | -89 |
| FEB 23 | 11854 | 11815 | 39 | FEB 23 | 35758 | 35693 | 65 |
| MAR 23 | 26815 | 26936 | -121 | MAR 23 | 40424 | 40469 | -45 |
| APR 23 | 19450 | 19690 | -240 | APR 23 | 40929 | 40907 | 23 |
| MAY 23 | 13152 | 13276 | -124 | MAY 23 | 35780 | 35725 | 55 |
| JUN 23 | 9952 | 9939 | 13 | JUN 23 | 32171 | 32148 | 23 |
| JUL 23 | 7512 | 7469 | 43 | JUL 23 | 31637 | 31598 | 39 |
| AUG 23 | 4700 | 4673 | 27 | AUG 23 | 32635 | 32581 | 54 |
| SEP 23 | 7278 | 7304 | -26 | SEP 23 | 31128 | 31109 | 19 |
| OCT 23 | 11411 | 11426 | -15 | OCT 23 | 35538 | 35530 | 8 |
| NOV 23 | 6067 | 5991 | 76 | NOV 23 | 35008 | 34917 | 91 |
| DEC 23 | 8818 | 8850 | -32 | DEC 23 | 32297 | 32334 | -37 |
| JAN 24 | 6936 | 6949 | -13 | JAN 24 | 23463 | 23455 | 8 |
| FEB 24 | 1570 | 1469 | 101 | FEB 24 | 16358 | 16247 | 111 |
| MAR 24 | 9185 | 9167 | 18 | MAR 24 | 22208 | 22167 | 41 |
| APR 24 | 4438 | 4447 | -9 | APR 24 | 15579 | 15553 | 27 |
| MAY 24 | 2058 | 2057 | 1 | MAY 24 | 16009 | 15982 | 28 |
| JUN 24 | 929 | 928 | 1 | JUN 24 | 16362 | 16319 | 43 |





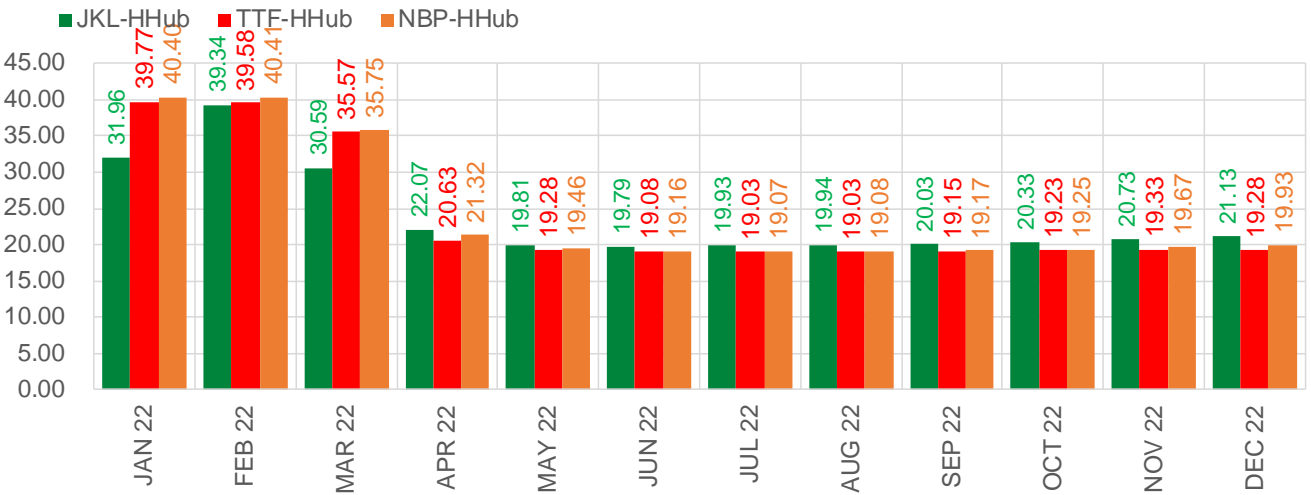
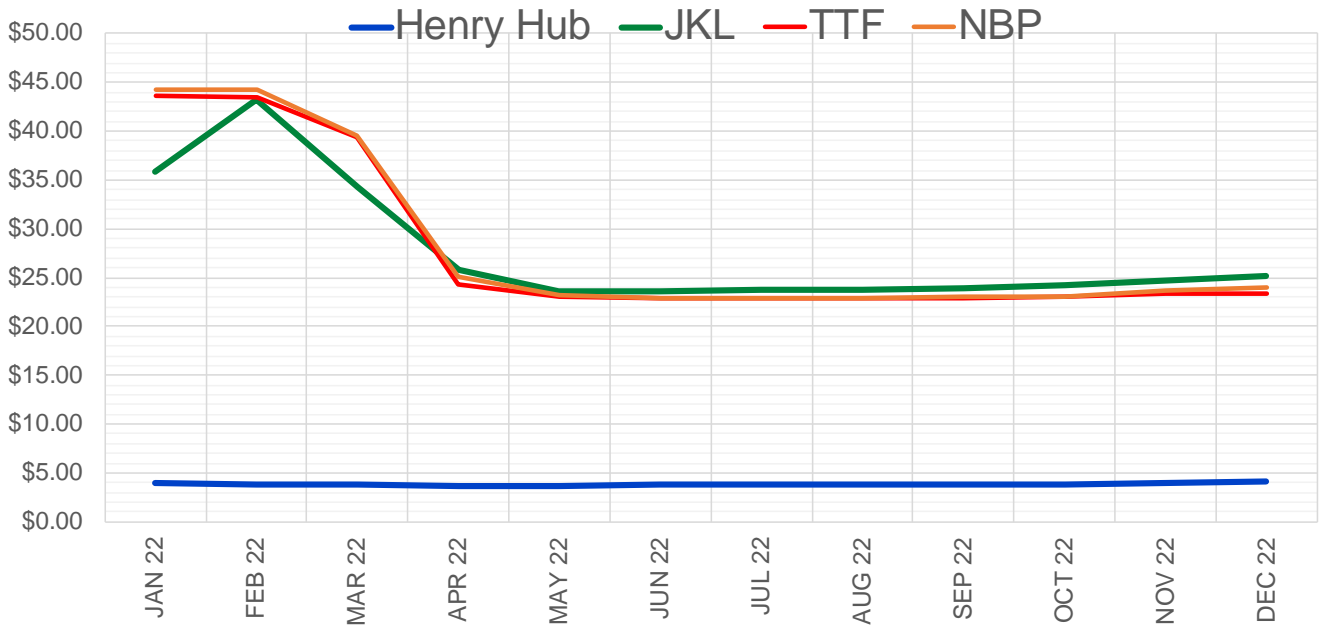
| | Jan-22 | Feb-22 | Mar-22 | Apr-22 | May-22 | Jun-22 | Jul-22 | Aug-22 | Sep-22 | Oct-22 | Nov-22 | Dec-22 |
|----------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Current Price | \$3.747 | \$3.713 | \$3.619 | \$3.552 | \$3.567 | \$3.613 | \$3.665 | \$3.683 | \$3.672 | \$3.704 | \$3.805 | \$3.978 |
| Last Week | \$3.708 | \$3.674 | \$3.585 | \$3.497 | \$3.505 | \$3.552 | \$3.607 | \$3.622 | \$3.610 | \$3.645 | \$3.742 | \$3.932 |
| vs. Last Week | \$0.039 | \$0.039 | \$0.034 | \$0.055 | \$0.062 | \$0.061 | \$0.058 | \$0.061 | \$0.062 | \$0.059 | \$0.063 | \$0.046 |
| 4 Weeks Ago | \$5.177 | \$5.270 | \$5.152 | \$4.854 | \$4.068 | \$3.987 | \$4.016 | \$4.059 | \$4.062 | \$4.039 | \$4.065 | \$4.142 |
| vs. 4 Weeks Ago | -\$1.430 | -\$1.557 | -\$1.533 | -\$1.302 | -\$0.501 | -\$0.374 | -\$0.351 | -\$0.376 | -\$0.390 | -\$0.335 | -\$0.260 | -\$0.164 |
| Last Year | \$2.682 | \$2.680 | \$2.662 | \$2.670 | \$2.684 | \$2.728 | \$2.783 | \$2.802 | \$2.792 | \$2.815 | \$2.870 | \$2.990 |
| vs. Last Year | \$1.065 | \$1.033 | \$0.957 | \$0.882 | \$0.883 | \$0.885 | \$0.882 | \$0.881 | \$0.880 | \$0.889 | \$0.935 | \$0.988 |

| | Units | Cash Settled | Prompt Settle | Cash to Prompt |
|-----------------------|----------|--------------|---------------|----------------|
| AGT Citygate | \$/MMBtu | 3.70 | 17.63 | 13.93 |
| TETCO M3 | \$/MMBtu | 2.90 | 6.64 | 3.74 |
| FGT Zone 3 | \$/MMBtu | 3.51 | 3.90 | 0.39 |
| Zone 6 NY | \$/MMBtu | 3.51 | 7.55 | 4.04 |
| Chicago Citygate | \$/MMBtu | 3.59 | 4.10 | 0.51 |
| Michcon | \$/MMBtu | 3.55 | 3.57 | 0.02 |
| Columbia TCO Pool | \$/MMBtu | 2.92 | 3.37 | 0.45 |
| Ventura | \$/MMBtu | 3.35 | 4.67 | 1.32 |
| Rockies/Opal | \$/MMBtu | 5.20 | 3.97 | -1.24 |
| El Paso Permian Basin | \$/MMBtu | 3.40 | 3.88 | 0.48 |
| Socal Citygate | \$/MMBtu | 6.55 | 5.36 | -1.19 |
| Malin | \$/MMBtu | 5.13 | 4.63 | -0.51 |
| Houston Ship Channel | \$/MMBtu | 3.41 | 4.08 | 0.67 |
| Henry Hub Cash | \$/MMBtu | 3.76 | 3.69 | -0.07 |
| AECO Cash | C\$/GJ | 3.43 | 2.88 | -0.55 |
| Station2 Cash | C\$/GJ | 3.06 | 5.18 | 2.12 |
| Dawn Cash | C\$/GJ | 3.68 | 3.72 | 0.04 |

Source: CME, Bloomberg

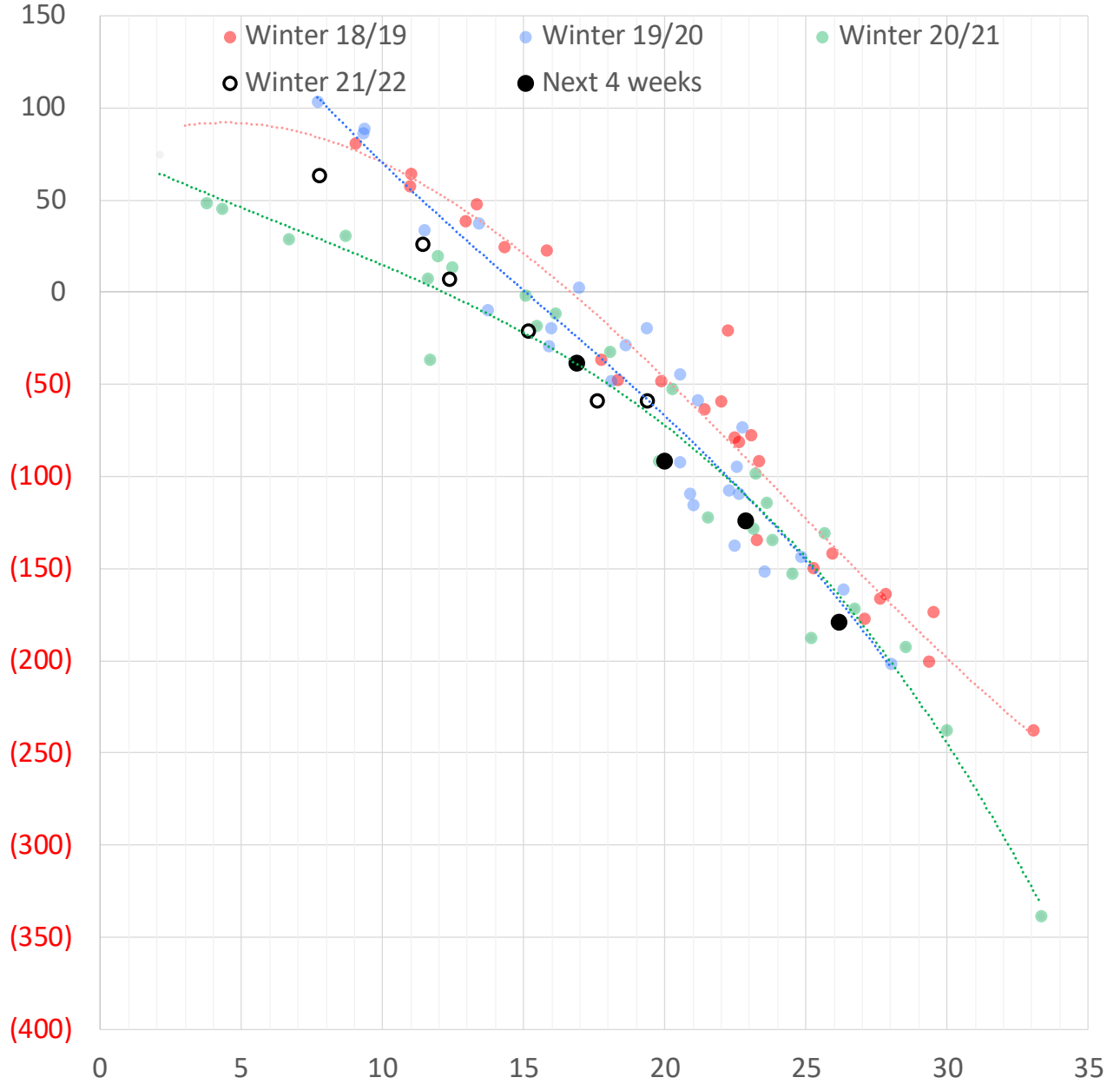
| | Units | Current Price | vs. Last Week | vs. 4 Weeks Ago | vs. Last Year |
|-------------------------|--------------|---------------|---------------|-----------------|---------------|
| NatGas Jul21/Oct21 | \$/MMBtu | 2.224 | ▲ 0.000 | ▲ 0.000 | ▲ 2.193 |
| NatGas Oct21/Nov21 | \$/MMBtu | 0.361 | ▲ 0.000 | ▲ 0.000 | ▲ 0.305 |
| NatGas Oct21/Jan22 | \$/MMBtu | -2.039 | ▼ -0.013 | ▼ -1.112 | ▼ -2.314 |
| NatGas Apr22/Oct22 | \$/MMBtu | 0.143 | ▼ -0.003 | ▲ 0.122 | ▲ 0.117 |
| WTI Crude | \$/Bbl | 70.87 | ▼ -1.490 | ▼ -7.490 | ▲ 23.050 |
| Brent Crude | \$/Bbl | 73.88 | ▼ -1.940 | ▼ -6.400 | ▲ 22.800 |
| Fuel Oil, NY Harbour 1% | \$/Bbl | 97.18 | ▲ 0.000 | ▲ 0.000 | ▲ 0.000 |
| Heating Oil | cents/Gallon | 222.04 | ▼ -4.090 | ▼ -14.400 | ▲ 74.250 |
| Propane, Mt. Bel | cents/Gallon | 1.03 | ▲ 0.029 | ▼ -0.236 | ▲ 0.421 |
| Ethane, Mt. Bel | cents/Gallon | 0.33 | ▼ -0.008 | ▼ -0.071 | ▲ 0.137 |
| 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 | | | |

Nat Gas Term Structure (\$MMBTU)



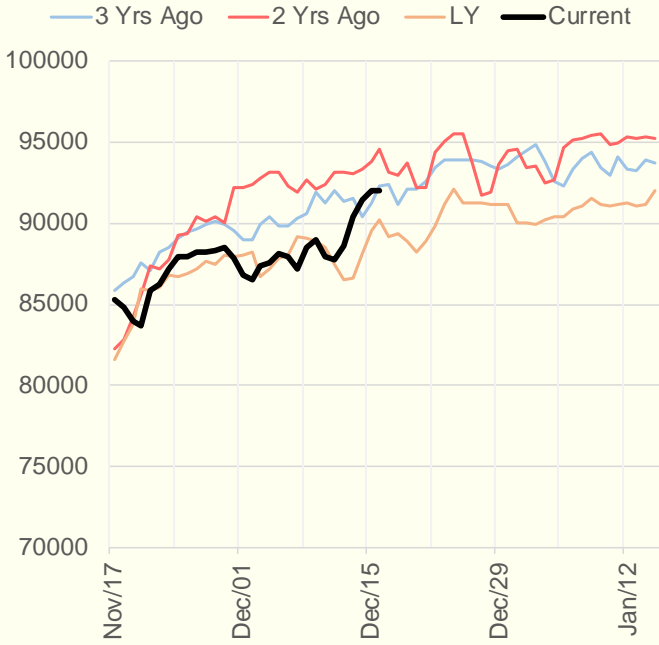
| | JAN 22 | FEB 22 | MAR 22 | APR 22 | MAY 22 | JUN 22 | JUL 22 | AUG 22 | SEP 22 | OCT 22 | NOV 22 | DEC 22 |
|------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Henry Hub | \$3.911 | \$3.861 | \$3.762 | \$3.710 | \$3.728 | \$3.773 | \$3.811 | \$3.835 | \$3.818 | \$3.852 | \$3.954 | \$4.118 |
| JKL | \$35.870 | \$43.200 | \$34.355 | \$25.775 | \$23.540 | \$23.560 | \$23.740 | \$23.770 | \$23.850 | \$24.185 | \$24.680 | \$25.245 |
| JKL-HHub | \$31.959 | \$39.339 | \$30.593 | \$22.065 | \$19.812 | \$19.787 | \$19.929 | \$19.935 | \$20.032 | \$20.333 | \$20.726 | \$21.127 |
| TTF | \$43.682 | \$43.437 | \$39.329 | \$24.341 | \$23.003 | \$22.857 | \$22.845 | \$22.865 | \$22.967 | \$23.080 | \$23.288 | \$23.400 |
| TTF-HHub | \$39.771 | \$39.576 | \$35.567 | \$20.631 | \$19.275 | \$19.084 | \$19.034 | \$19.030 | \$19.149 | \$19.228 | \$19.334 | \$19.282 |
| NBP | \$44.309 | \$44.268 | \$39.508 | \$25.033 | \$23.190 | \$22.933 | \$22.880 | \$22.914 | \$22.986 | \$23.106 | \$23.627 | \$24.043 |
| NBP-HHub | \$40.398 | \$40.407 | \$35.746 | \$21.323 | \$19.462 | \$19.160 | \$19.069 | \$19.079 | \$19.168 | \$19.254 | \$19.673 | \$19.925 |

Weather Storage Model - Next 4 Week Forecast

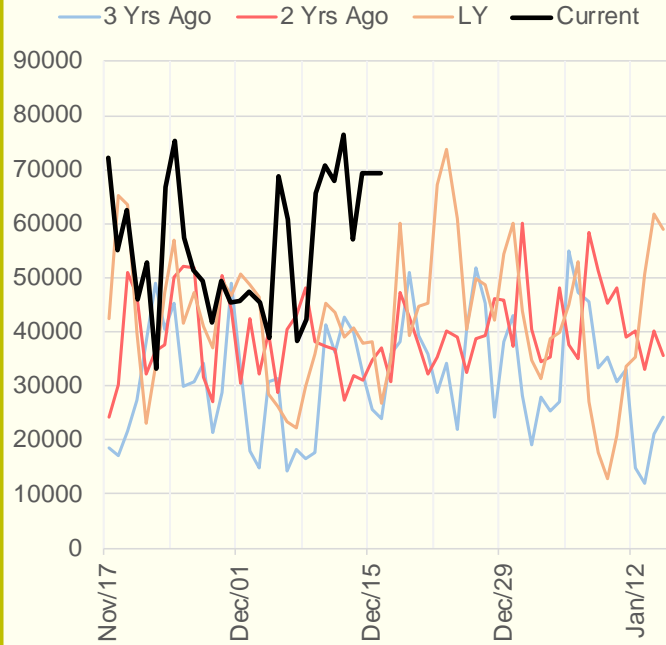


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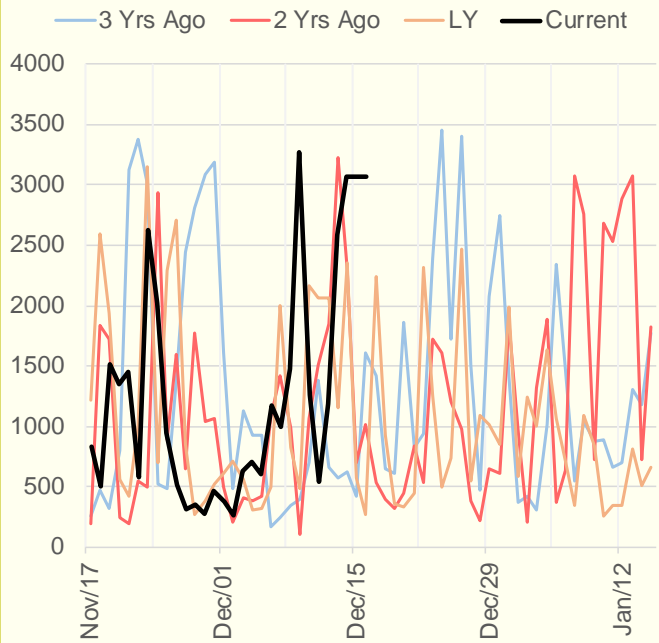
NRC Nuclear Daily Output



US Wind



CALI Wind



TEXAS Wind

