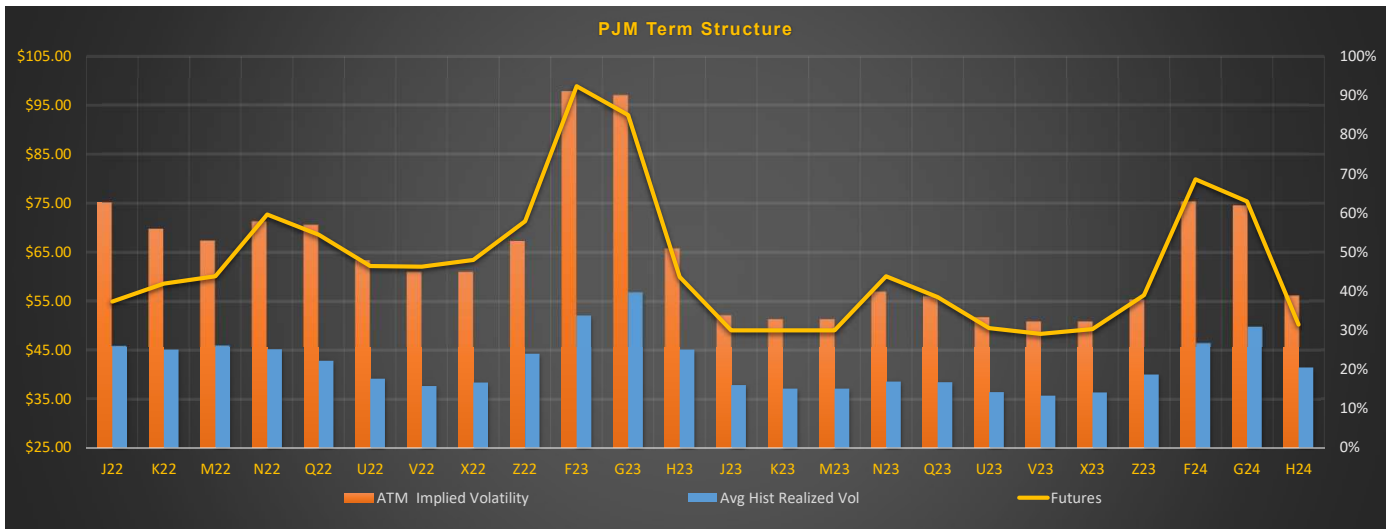


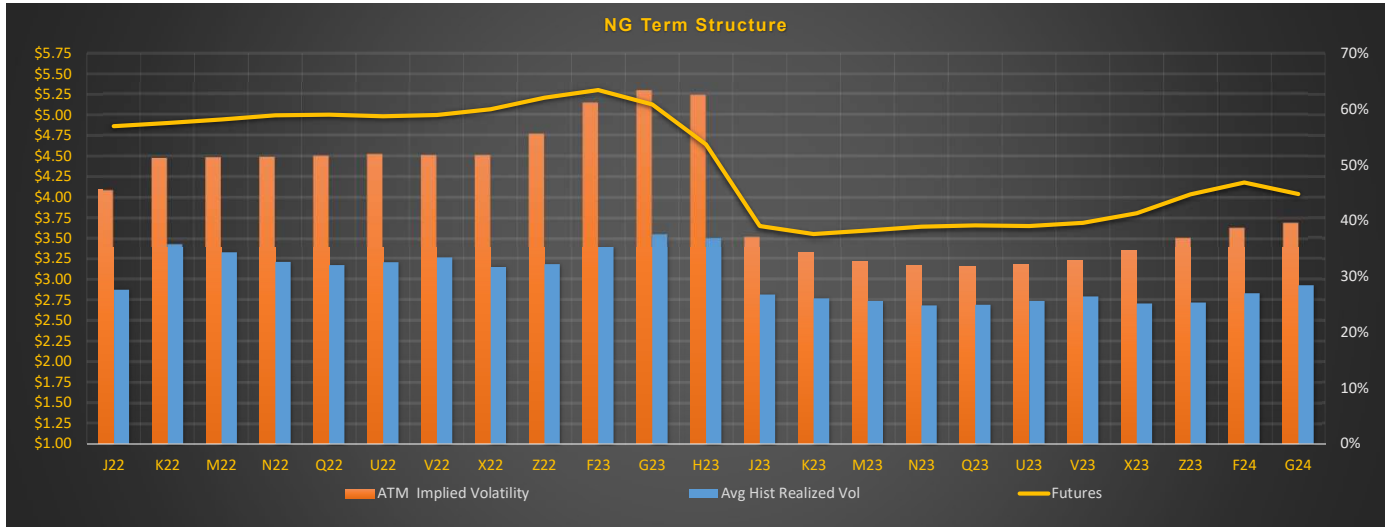
Date: 3/21/2022



| PJM Term Structure |               |                      |               |              |            |                        |        |         |         |                     |        |                             |         |       |          |          |
|--------------------|---------------|----------------------|---------------|--------------|------------|------------------------|--------|---------|---------|---------------------|--------|-----------------------------|---------|-------|----------|----------|
| Contract           | Option Expiry | Trade Days to Expiry | Futures Price | ATM Straddle | Break-even | ATM Implied Volatility |        |         |         | Realized Volatility |        | Implied Volatility and Skew |         |       |          |          |
|                    |               |                      |               |              |            | Vol                    | 1D Chg | 1Wk Chg | 1Mo Chg | Avg Hist            | 30 day | 10d Put                     | 25d Put | ATM   | 25d Call | 10d Call |
| J22                | 3/30/22       | 8                    | \$ 54.90      | \$ 4.54      | \$ 2.17    | 62.7%                  | 0.3%   | -5.1%   | 5.7%    | 26.2%               | 40.5%  | -6.1%                       | -3.5%   | 62.7% | 4.1%     | 10.6%    |
| K22                | 4/28/22       | 28                   | \$ 58.50      | \$ 8.54      | \$ 2.06    | 56.0%                  | -0.1%  | 0.0%    | 8.6%    | 25.1%               | 38.0%  | -5.2%                       | -2.9%   | 56.0% | 5.2%     | 11.1%    |
| M22                | 5/27/22       | 49                   | \$ 60.00      | \$ 10.92     | \$ 2.00    | 53.0%                  | 0.0%   | 1.0%    | 6.6%    | 26.3%               | 36.6%  | -6.6%                       | -2.9%   | 53.0% | 5.5%     | 12.0%    |
| N22                | 6/29/22       | 71                   | \$ 72.65      | \$ 17.57     | \$ 2.65    | 57.9%                  | 0.0%   | 0.3%    | 12.4%   | 25.2%               | 35.8%  | -11.8%                      | -7.0%   | 57.9% | 7.7%     | 9.2%     |
| Q22                | 7/28/22       | 91                   | \$ 68.55      | \$ 18.51     | \$ 2.46    | 57.0%                  | 0.0%   | 0.6%    | 13.5%   | 22.2%               | 34.6%  | -10.8%                      | -6.1%   | 57.0% | 9.4%     | 22.8%    |
| U22                | 8/30/22       | 114                  | \$ 62.10      | \$ 15.80     | \$ 1.88    | 48.0%                  | 0.0%   | 0.0%    | 8.4%    | 17.7%               | 34.1%  | -8.3%                       | -3.3%   | 48.0% | 5.4%     | 14.2%    |
| V22                | 9/29/22       | 135                  | \$ 62.00      | \$ 16.12     | \$ 1.76    | 45.0%                  | 0.0%   | -1.0%   | 5.8%    | 15.7%               | 31.0%  | -6.6%                       | -2.5%   | 45.0% | 5.1%     | 13.2%    |
| X22                | 10/28/22      | 156                  | \$ 63.40      | \$ 17.68     | \$ 1.80    | 45.0%                  | 0.0%   | 0.0%    | 6.0%    | 16.7%               | 31.4%  | -2.1%                       | -1.3%   | 45.0% | 3.7%     | 10.0%    |
| Z22                | 11/29/22      | 177                  | \$ 71.25      | \$ 24.87     | \$ 2.37    | 52.9%                  | -0.1%  | 1.9%    | 8.0%    | 24.0%               | 36.9%  | -2.7%                       | -1.7%   | 52.9% | 7.6%     | 20.9%    |
| F23                | 12/29/22      | 198                  | \$ 98.90      | \$ 61.72     | \$ 5.67    | 91.0%                  | 1.0%   | 3.5%    | 19.9%   | 33.9%               | 47.7%  | -9.3%                       | -5.9%   | 91.0% | 23.1%    | 34.3%    |
| G23                | 1/30/23       | 218                  | \$ 93.05      | \$ 60.37     | \$ 5.28    | 90.0%                  | 1.0%   | 3.5%    | 19.0%   | 39.8%               | 47.7%  | -9.2%                       | -5.7%   | 90.0% | 23.9%    | 35.5%    |
| H23                | 2/27/23       | 237                  | \$ 59.90      | \$ 23.46     | \$ 1.92    | 51.0%                  | 0.0%   | 0.9%    | 7.0%    | 25.0%               | 24.8%  | -4.6%                       | -2.7%   | 51.0% | 9.6%     | 24.6%    |
| J23                | 3/30/23       | 260                  | \$ 48.95      | \$ 13.41     | \$ 1.05    | 34.0%                  | -0.1%  | 0.6%    | 4.5%    | 16.0%               | 22.8%  | -5.2%                       | -3.3%   | 34.0% | 4.8%     | 9.0%     |
| K23                | 4/27/23       | 279                  | \$ 48.95      | \$ 13.49     | \$ 1.02    | 33.0%                  | 0.1%   | 0.6%    | 5.0%    | 15.0%               | 34.1%  | -3.8%                       | -2.4%   | 33.0% | 4.4%     | 9.4%     |
| M23                | 5/30/23       | 301                  | \$ 48.95      | \$ 14.03     | \$ 1.02    | 33.0%                  | 0.0%   | 0.4%    | 5.0%    | 15.1%               | 34.3%  | -4.0%                       | -2.6%   | 33.0% | 5.0%     | 10.0%    |
| N23                | 6/29/23       | 323                  | \$ 60.05      | \$ 21.45     | \$ 1.51    | 40.0%                  | 0.1%   | 1.0%    | 9.0%    | 16.9%               | 20.0%  | -5.6%                       | -3.9%   | 40.0% | 6.9%     | 25.3%    |
| Q23                | 7/28/23       | 343                  | \$ 55.75      | \$ 19.95     | \$ 1.37    | 38.9%                  | -0.1%  | 0.8%    | 8.4%    | 16.8%               | 20.0%  | -5.4%                       | -3.8%   | 38.9% | 6.9%     | 25.7%    |
| U23                | 8/30/23       | 366                  | \$ 49.45      | \$ 15.81     | \$ 1.04    | 33.5%                  | -0.1%  | 1.1%    | 5.5%    | 14.2%               | 34.1%  | -5.3%                       | -3.8%   | 33.5% | 6.8%     | 11.6%    |
| V23                | 9/28/23       | 386                  | \$ 48.25      | \$ 15.27     | \$ 0.98    | 32.4%                  | -0.2%  | 0.9%    | 5.4%    | 13.3%               | 22.0%  | -4.8%                       | -3.4%   | 32.4% | 6.4%     | 11.1%    |
| X23                | 10/30/23      | 408                  | \$ 49.25      | \$ 16.03     | \$ 1.01    | 32.4%                  | -0.2%  | 0.9%    | 6.4%    | 14.1%               | 22.5%  | -4.0%                       | -2.8%   | 32.4% | 6.6%     | 10.5%    |
| Z23                | 11/29/23      | 429                  | \$ 56.20      | \$ 21.90     | \$ 1.35    | 38.0%                  | 0.0%   | 1.2%    | 7.4%    | 18.7%               | 23.3%  | -1.2%                       | -0.5%   | 38.0% | 8.4%     | 15.6%    |
| F24                | 12/28/23      | 449                  | \$ 79.85      | \$ 52.01     | \$ 3.17    | 63.0%                  | 0.0%   | 2.0%    | 8.0%    | 26.9%               | #N/A   | -2.4%                       | -1.4%   | 63.0% | 17.3%    | 21.2%    |
| G24                | 1/30/24       | 470                  | \$ 75.35      | \$ 49.49     | \$ 2.94    | 62.0%                  | 0.0%   | 2.0%    | 8.0%    | 31.1%               | #N/A   | -2.4%                       | -1.4%   | 62.0% | 17.3%    | 21.3%    |
| H24                | 2/28/24       | 490                  | \$ 50.15      | \$ 21.47     | \$ 1.23    | 39.0%                  | 0.0%   | 1.0%    | 3.0%    | 20.4%               | #N/A   | -1.8%                       | -0.8%   | 39.0% | 5.2%     | 8.3%     |

| PJM Cal 1x Term Structure |               |                      |               |              |            |                        |        |         |         |                     |        |                             |         |       |          |          |
|---------------------------|---------------|----------------------|---------------|--------------|------------|------------------------|--------|---------|---------|---------------------|--------|-----------------------------|---------|-------|----------|----------|
| Contract                  | Option Expiry | Trade Days to Expiry | Futures Price | ATM Straddle | Break-even | ATM Implied Volatility |        |         |         | Realized Volatility |        | Implied Volatility and Skew |         |       |          |          |
|                           |               |                      |               |              |            | Vol                    | 1D Chg | 1Wk Chg | 1Mo Chg | Avg Hist            | 30 day | 10d Put                     | 25d Put | ATM   | 25d Call | 10d Call |
| Cal23                     | 12/23/22      | 195                  | \$ 59.61      | \$ 16.01     | \$ 1.47    | 39.2%                  | -0.1%  | 0.2%    | 5.7%    | 12.9%               | 24.7%  | -4.2%                       | -3.2%   | 39.2% | 4.3%     | 7.7%     |
| Cal24                     | 12/22/23      | 446                  | \$ 52.90      | \$ 15.57     | \$ 0.95    | 28.6%                  | 0.0%   | 0.1%    | 4.8%    | 10.7%               | 22.2%  | -2.4%                       | -1.7%   | 28.6% | 4.3%     | 6.8%     |
| Cal25                     | 12/20/24      | 697                  | \$ 51.10      | \$ 15.77     | \$ 0.79    | 24.5%                  | 0.0%   | 0.2%    | 2.6%    | 9.6%                | 17.8%  | -1.6%                       | -1.1%   | 24.5% | 4.0%     | 5.8%     |

## Option Trade Recap



| NG Term Structure |               |                      |               |              |            |                        |        |         |         |                     |        |                             |         |       |          |          |
|-------------------|---------------|----------------------|---------------|--------------|------------|------------------------|--------|---------|---------|---------------------|--------|-----------------------------|---------|-------|----------|----------|
| Contract          | Option Expiry | Trade Days to Expiry | Futures Price | ATM Straddle | Break-even | ATM Implied Volatility |        |         |         | Realized Volatility |        | Implied Volatility and Skew |         |       |          |          |
|                   |               |                      |               |              |            | Vol                    | 1D Chg | 1Wk Chg | 1Mo Chg | Avg Hist            | 30 day | 10d Put                     | 25d Put | ATM   | 25d Call | 10d Call |
| J22               | 3/28/22       | 6                    | \$ 4.863      | \$ 0.31      | \$ 0.139   | 45.5%                  | -2.6%  | -3.3%   | -9.6%   | 27.6%               | 54.5%  | -2.0%                       | -2.9%   | 45.5% | 2.7%     | 5.7%     |
| K22               | 4/26/22       | 26                   | \$ 4.902      | \$ 0.66      | \$ 0.158   | 51.2%                  | -1.5%  | -0.3%   | 1.9%    | 35.9%               | 52.4%  | -3.6%                       | -3.1%   | 51.2% | 4.0%     | 8.6%     |
| M22               | 5/25/22       | 47                   | \$ 4.946      | \$ 0.88      | \$ 0.160   | 51.3%                  | -1.1%  | -0.5%   | 4.0%    | 34.3%               | 50.9%  | -1.9%                       | -2.0%   | 51.3% | 4.8%     | 9.8%     |
| N22               | 6/27/22       | 69                   | \$ 4.997      | \$ 1.08      | \$ 0.162   | 51.4%                  | -0.7%  | 1.0%    | 5.9%    | 32.6%               | 49.1%  | -2.8%                       | -2.3%   | 51.4% | 4.6%     | 9.8%     |
| Q22               | 7/26/22       | 89                   | \$ 5.004      | \$ 1.23      | \$ 0.163   | 51.6%                  | -0.6%  | 1.3%    | 6.7%    | 32.0%               | 48.8%  | -3.0%                       | -2.6%   | 51.6% | 5.1%     | 10.4%    |
| U22               | 8/26/22       | 112                  | \$ 4.984      | \$ 1.37      | \$ 0.163   | 51.9%                  | -0.4%  | 1.7%    | 6.9%    | 32.5%               | 48.7%  | -4.3%                       | -2.7%   | 51.9% | 5.4%     | 10.7%    |
| V22               | 9/27/22       | 133                  | \$ 4.999      | \$ 1.49      | \$ 0.163   | 51.7%                  | -0.8%  | 1.1%    | 6.9%    | 33.4%               | 48.6%  | -3.7%                       | -2.9%   | 51.7% | 5.9%     | 11.9%    |
| X22               | 10/26/22      | 154                  | \$ 5.069      | \$ 1.63      | \$ 0.165   | 51.7%                  | -1.1%  | 0.0%    | 5.3%    | 31.7%               | 46.8%  | -4.5%                       | -3.8%   | 51.7% | 7.5%     | 14.8%    |
| Z22               | 11/25/22      | 175                  | \$ 5.208      | \$ 1.90      | \$ 0.182   | 55.5%                  | 1.3%   | 1.0%    | 5.6%    | 32.2%               | 44.6%  | -6.3%                       | -5.0%   | 55.5% | 11.8%    | 22.0%    |
| F23               | 12/27/22      | 196                  | \$ 5.301      | \$ 2.25      | \$ 0.204   | 61.0%                  | 0.7%   | 1.2%    | 7.5%    | 35.4%               | 43.4%  | -10.0%                      | -7.7%   | 61.0% | 14.9%    | 24.9%    |
| G23               | 1/26/23       | 216                  | \$ 5.126      | \$ 2.36      | \$ 0.204   | 63.2%                  | 0.7%   | 0.1%    | 7.4%    | 37.6%               | 41.7%  | -10.4%                      | -8.3%   | 63.2% | 19.5%    | 32.6%    |
| H23               | 2/23/23       | 235                  | \$ 4.641      | \$ 2.20      | \$ 0.182   | 62.4%                  | 0.7%   | 0.0%    | 7.8%    | 36.9%               | 38.3%  | -8.9%                       | -7.1%   | 62.4% | 19.0%    | 34.2%    |
| J23               | 3/28/23       | 258                  | \$ 3.646      | \$ 1.09      | \$ 0.085   | 37.2%                  | 0.5%   | 0.0%    | 3.0%    | 26.8%               | 14.9%  | 1.5%                        | 0.5%    | 37.2% | 0.8%     | 3.7%     |
| K23               | 4/25/23       | 277                  | \$ 3.551      | \$ 1.02      | \$ 0.077   | 34.2%                  | 0.6%   | 0.6%    | 4.4%    | 26.1%               | 12.1%  | 1.6%                        | 0.6%    | 34.2% | 0.8%     | 3.6%     |
| M23               | 5/25/23       | 299                  | \$ 3.592      | \$ 1.02      | \$ 0.074   | 32.7%                  | 0.7%   | 1.2%    | 4.4%    | 25.6%               | 11.6%  | 1.6%                        | 0.6%    | 32.7% | 0.8%     | 3.6%     |
| N23               | 6/27/23       | 321                  | \$ 3.639      | \$ 1.04      | \$ 0.073   | 32.0%                  | 0.7%   | 1.3%    | 4.3%    | 24.8%               | 11.3%  | 1.6%                        | 0.5%    | 32.0% | 0.8%     | 3.4%     |
| Q23               | 7/26/23       | 341                  | \$ 3.657      | \$ 1.08      | \$ 0.073   | 31.8%                  | 0.6%   | 1.2%    | 4.1%    | 24.9%               | 11.0%  | 1.7%                        | 0.6%    | 31.8% | 0.8%     | 3.7%     |
| U23               | 8/28/23       | 364                  | \$ 3.648      | \$ 1.11      | \$ 0.074   | 32.1%                  | 0.7%   | 1.3%    | 4.2%    | 25.6%               | 10.7%  | 1.6%                        | 0.5%    | 32.1% | 0.8%     | 3.6%     |
| V23               | 9/26/23       | 384                  | \$ 3.685      | \$ 1.19      | \$ 0.076   | 32.9%                  | 0.6%   | 1.3%    | 4.4%    | 26.4%               | 10.6%  | 1.7%                        | 0.5%    | 32.9% | 0.9%     | 3.8%     |
| X23               | 10/26/23      | 406                  | \$ 3.806      | \$ 1.32      | \$ 0.083   | 34.6%                  | 0.7%   | 0.1%    | 4.0%    | 25.2%               | 10.0%  | 1.0%                        | 0.1%    | 34.6% | 2.3%     | 8.0%     |
| Z23               | 11/27/23      | 427                  | \$ 4.033      | \$ 1.53      | \$ 0.094   | 37.0%                  | 0.6%   | -0.6%   | 1.6%    | 25.3%               | 9.8%   | 1.1%                        | 0.2%    | 37.0% | 2.6%     | 8.3%     |
| F24               | 12/26/23      | 447                  | \$ 4.178      | \$ 1.71      | \$ 0.102   | 38.8%                  | 0.3%   | -2.9%   | -1.9%   | 27.0%               | 10.1%  | -3.3%                       | -3.0%   | 38.8% | 6.1%     | 6.4%     |
| G24               | 1/26/24       | 468                  | \$ 4.040      | \$ 1.72      | \$ 0.101   | 39.7%                  | 0.0%   | -3.2%   | -2.7%   | 28.4%               | 11.6%  | -2.9%                       | -2.6%   | 39.7% | 6.6%     | 7.0%     |



