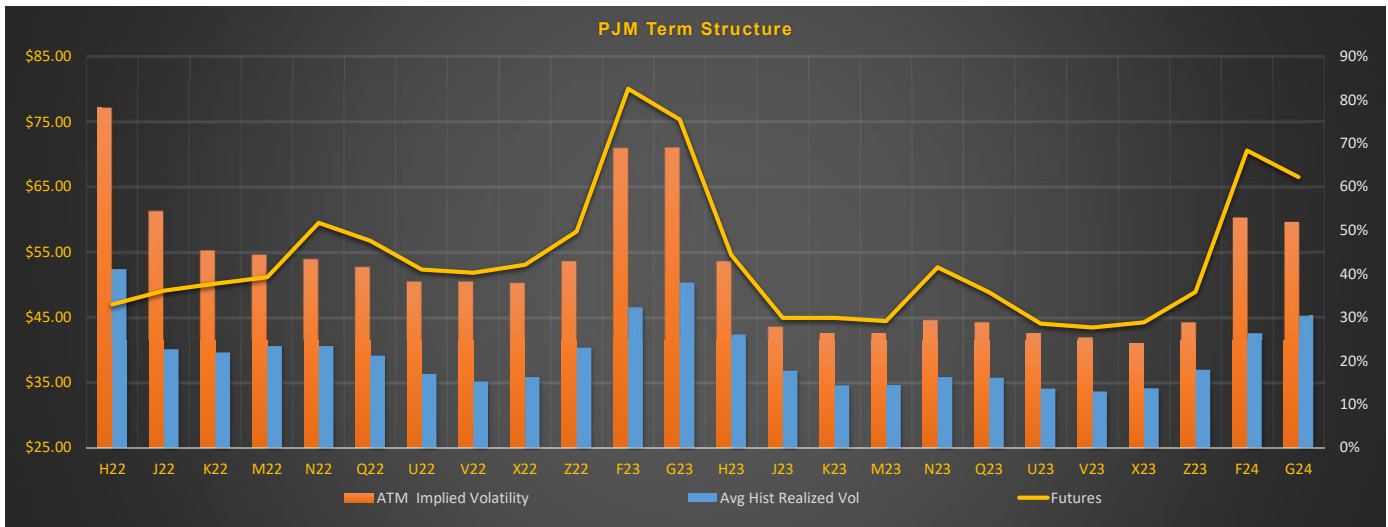


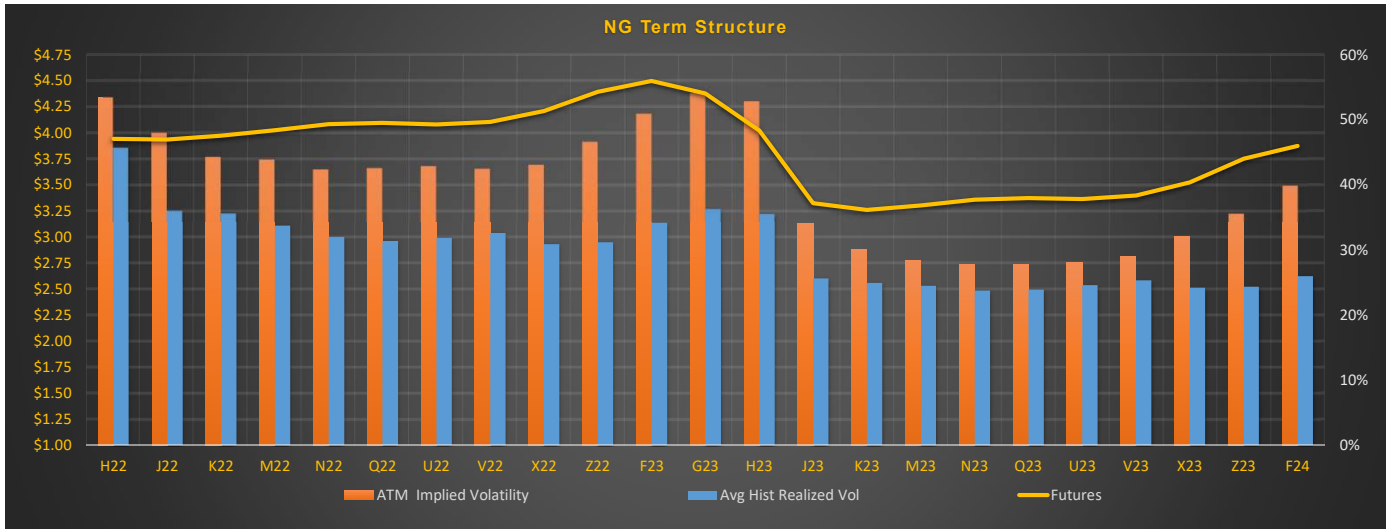
**Date:** 2/14/2022



| Contract | PJM Term Structure |                      |               |              |            |                        |        |         |         |                     |        |                             |         |       |          |          |
|----------|--------------------|----------------------|---------------|--------------|------------|------------------------|--------|---------|---------|---------------------|--------|-----------------------------|---------|-------|----------|----------|
|          | 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 |
| H22      | 2/25/22            | 9                    | \$ 46.95      | \$ 5.31      | \$ 2.31    | 78.2%                  | -0.3%  | -19.9%  | -1.5%   | 41.2%               | 73.6%  | -3.2%                       | -2.2%   | 78.2% | 5.6%     | 16.3%    |
| J22      | 3/30/22            | 32                   | \$ 49.10      | \$ 7.48      | \$ 1.69    | 54.5%                  | 0.0%   | 0.0%    | 13.4%   | 22.7%               | 41.4%  | -6.9%                       | -2.9%   | 54.5% | 1.2%     | 2.4%     |
| K22      | 4/28/22            | 52                   | \$ 50.15      | \$ 8.17      | \$ 1.44    | 45.5%                  | 0.0%   | -2.4%   | 5.6%    | 21.9%               | 38.5%  | -6.4%                       | -2.8%   | 45.5% | 0.8%     | 1.8%     |
| M22      | 5/27/22            | 73                   | \$ 51.15      | \$ 9.61      | \$ 1.43    | 44.5%                  | 0.0%   | -1.1%   | 4.6%    | 23.4%               | 37.6%  | -8.0%                       | -3.8%   | 44.5% | 1.0%     | 2.4%     |
| N22      | 6/29/22            | 95                   | \$ 59.45      | \$ 12.57     | \$ 1.63    | 43.5%                  | 0.0%   | -1.0%   | 3.1%    | 23.4%               | 42.7%  | -9.5%                       | -4.9%   | 43.5% | 4.3%     | 5.7%     |
| Q22      | 7/28/22            | 115                  | \$ 56.70      | \$ 12.62     | \$ 1.49    | 41.7%                  | 0.0%   | -0.7%   | 2.6%    | 21.2%               | 40.5%  | -7.6%                       | -3.6%   | 41.7% | 3.2%     | 5.8%     |
| U22      | 8/30/22            | 138                  | \$ 52.30      | \$ 11.78     | \$ 1.26    | 38.3%                  | 0.0%   | -0.2%   | -1.6%   | 17.0%               | 36.6%  | -6.6%                       | -4.9%   | 38.3% | 2.9%     | 3.8%     |
| V22      | 9/29/22            | 159                  | \$ 51.80      | \$ 12.50     | \$ 1.25    | 38.3%                  | 0.1%   | 0.1%    | -0.7%   | 15.2%               | 33.5%  | -3.7%                       | -2.7%   | 38.3% | 3.7%     | 4.8%     |
| X22      | 10/28/22           | 180                  | \$ 53.05      | \$ 13.43     | \$ 1.27    | 38.0%                  | 0.0%   | 0.0%    | -1.0%   | 16.3%               | 33.8%  | -1.6%                       | -1.2%   | 38.0% | 3.7%     | 9.9%     |
| Z22      | 11/29/22           | 201                  | \$ 58.15      | \$ 17.61     | \$ 1.58    | 43.0%                  | 0.0%   | -0.1%   | 1.1%    | 23.0%               | 35.2%  | -2.0%                       | -1.8%   | 43.0% | 6.7%     | 18.9%    |
| F23      | 12/29/22           | 222                  | \$ 80.05      | \$ 40.47     | \$ 3.48    | 69.0%                  | 0.0%   | -1.6%   | 8.0%    | 32.4%               | 49.2%  | -4.8%                       | -3.1%   | 69.0% | 14.4%    | 42.5%    |
| G23      | 1/30/23            | 242                  | \$ 75.30      | \$ 39.98     | \$ 3.28    | 69.1%                  | 0.1%   | -1.5%   | 11.1%   | 38.1%               | 49.0%  | -3.0%                       | -2.0%   | 69.1% | 13.1%    | 35.2%    |
| H23      | 2/27/23            | 261                  | \$ 54.55      | \$ 18.91     | \$ 1.48    | 43.0%                  | 0.0%   | 0.0%    | 3.0%    | 26.3%               | 33.4%  | -0.7%                       | -0.4%   | 43.0% | 4.1%     | 8.6%     |
| J23      | 3/30/23            | 284                  | \$ 44.90      | \$ 10.60     | \$ 0.79    | 28.0%                  | 0.0%   | 2.0%    | 3.8%    | 17.7%               | 21.1%  | -1.4%                       | -0.6%   | 28.0% | 1.7%     | 4.0%     |
| K23      | 4/27/23            | 303                  | \$ 44.90      | \$ 10.38     | \$ 0.75    | 26.5%                  | 0.0%   | 2.5%    | 3.3%    | 14.3%               | 21.2%  | -1.4%                       | -0.6%   | 26.5% | 1.6%     | 3.9%     |
| M23      | 5/30/23            | 325                  | \$ 44.40      | \$ 10.64     | \$ 0.74    | 26.5%                  | 0.0%   | 0.5%    | 2.3%    | 14.4%               | 22.3%  | -1.3%                       | -0.6%   | 26.5% | 1.9%     | 2.8%     |
| N23      | 6/29/23            | 347                  | \$ 52.65      | \$ 14.41     | \$ 0.98    | 29.5%                  | 0.0%   | 0.5%    | 1.5%    | 16.2%               | 24.2%  | -1.9%                       | -1.3%   | 29.5% | 2.6%     | 4.3%     |
| Q23      | 7/28/23            | 367                  | \$ 48.85      | \$ 13.59     | \$ 0.89    | 29.0%                  | 0.0%   | 0.5%    | 2.1%    | 16.1%               | 23.8%  | -1.4%                       | -0.9%   | 29.0% | 2.9%     | 5.2%     |
| U23      | 8/30/23            | 390                  | \$ 44.00      | \$ 11.50     | \$ 0.73    | 26.5%                  | 0.0%   | 0.5%    | 2.5%    | 13.6%               | 19.4%  | -1.4%                       | -0.9%   | 26.5% | 2.7%     | 3.8%     |
| V23      | 9/28/23            | 410                  | \$ 43.45      | \$ 11.21     | \$ 0.70    | 25.5%                  | 0.0%   | 1.5%    | 2.5%    | 12.9%               | 17.0%  | -1.0%                       | -0.7%   | 25.5% | 2.2%     | 3.8%     |
| X23      | 10/30/23           | 432                  | \$ 44.20      | \$ 11.00     | \$ 0.67    | 24.0%                  | 0.0%   | 1.0%    | 3.0%    | 13.7%               | 17.7%  | -0.8%                       | -0.4%   | 24.0% | 0.7%     | 1.0%     |
| Z23      | 11/29/23           | 453                  | \$ 48.90      | \$ 15.06     | \$ 0.89    | 29.0%                  | 0.0%   | 1.0%    | 2.0%    | 18.0%               | 20.6%  | -1.1%                       | -0.5%   | 29.0% | 0.7%     | 1.0%     |
| F24      | 12/28/23           | 473                  | \$ 70.55      | \$ 39.91     | \$ 2.36    | 53.0%                  | 0.0%   | 21.1%   | 21.1%   | 26.4%               | #N/A   | -0.9%                       | -0.8%   | 53.0% | 8.7%     | 10.6%    |
| G24      | 1/30/24            | 494                  | \$ 66.50      | \$ 37.80     | \$ 2.18    | 52.0%                  | 0.0%   | 22.1%   | 22.1%   | 30.5%               | #N/A   | -0.9%                       | -0.8%   | 52.0% | 8.7%     | 10.6%    |

| 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      | 219                  | \$ 52.06      | \$ 12.26     | \$ 1.06    | 32.4%                  | -0.2%  | -2.0%   | 2.2%    | 12.4%               | 25.9%  | -3.8%                       | -2.0%   | 32.4% | 2.3%     | 3.6%     |
| Cal24                     | 12/22/23      | 470                  | \$ 48.06      | \$ 11.82     | \$ 0.70    | 23.1%                  | 0.0%   | -0.3%   | 1.0%    | 10.5%               | 23.3%  | -1.9%                       | -1.5%   | 23.1% | 2.9%     | 3.8%     |
| Cal25                     | 12/20/24      | 721                  | \$ 46.30      | \$ 12.93     | \$ 0.63    | 21.6%                  | 0.0%   | 0.0%    | 1.3%    | 9.5%                | 18.6%  | -0.7%                       | -0.6%   | 21.6% | 1.0%     | 1.5%     |

## 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 |
| H22               | 2/23/22       | 7                    | \$ 3.941      | \$ 0.32      | \$ 0.133   | 53.4%                  | 2.5%   | -12.7%  | -7.0%   | 45.7%               | 115.0% | 2.6%                        | -0.1%   | 53.4% | 3.7%     | 10.5%    |
| J22               | 3/28/22       | 30                   | \$ 3.935      | \$ 0.54      | \$ 0.119   | 48.0%                  | 1.4%   | -3.8%   | -0.3%   | 36.0%               | 82.4%  | -2.6%                       | -2.1%   | 48.0% | 1.9%     | 5.7%     |
| K22               | 4/26/22       | 50                   | \$ 3.970      | \$ 0.64      | \$ 0.111   | 44.3%                  | 0.5%   | -4.2%   | 2.0%    | 35.7%               | 79.4%  | -2.0%                       | -1.8%   | 44.3% | 3.0%     | 6.4%     |
| M22               | 5/25/22       | 71                   | \$ 4.024      | \$ 0.76      | \$ 0.111   | 43.9%                  | 1.0%   | -4.0%   | 2.7%    | 33.7%               | 77.6%  | -2.4%                       | -2.4%   | 43.9% | 3.8%     | 6.8%     |
| N22               | 6/27/22       | 93                   | \$ 4.081      | \$ 0.85      | \$ 0.109   | 42.4%                  | 0.3%   | -3.7%   | 2.0%    | 32.0%               | 75.9%  | -3.4%                       | -3.1%   | 42.4% | 4.4%     | 7.9%     |
| Q22               | 7/26/22       | 113                  | \$ 4.094      | \$ 0.94      | \$ 0.110   | 42.6%                  | 0.6%   | -2.8%   | 2.8%    | 31.4%               | 75.1%  | -2.9%                       | -2.8%   | 42.6% | 4.9%     | 9.2%     |
| U22               | 8/26/22       | 136                  | \$ 4.079      | \$ 1.03      | \$ 0.110   | 42.9%                  | 0.4%   | -2.9%   | 3.0%    | 31.8%               | 75.1%  | -3.2%                       | -3.0%   | 42.9% | 5.1%     | 11.2%    |
| V22               | 9/27/22       | 157                  | \$ 4.105      | \$ 1.10      | \$ 0.110   | 42.5%                  | 0.4%   | -3.3%   | 2.1%    | 32.6%               | 74.4%  | -2.3%                       | -2.4%   | 42.5% | 5.9%     | 12.3%    |
| X22               | 10/26/22      | 178                  | \$ 4.210      | \$ 1.21      | \$ 0.114   | 43.1%                  | -0.6%  | -3.0%   | 1.4%    | 30.9%               | 71.7%  | -3.1%                       | -2.2%   | 43.1% | 5.6%     | 13.2%    |
| Z22               | 11/25/22      | 199                  | \$ 4.391      | \$ 1.45      | \$ 0.129   | 46.6%                  | -3.5%  | -1.1%   | 2.1%    | 31.2%               | 67.9%  | -2.8%                       | -2.3%   | 46.6% | 8.2%     | 18.8%    |
| F23               | 12/27/22      | 220                  | \$ 4.498      | \$ 1.70      | \$ 0.144   | 50.9%                  | -2.2%  | -2.8%   | 3.2%    | 34.2%               | 66.4%  | -6.7%                       | -5.0%   | 50.9% | 11.7%    | 27.1%    |
| G23               | 1/26/23       | 240                  | \$ 4.377      | \$ 1.84      | \$ 0.149   | 54.1%                  | -1.8%  | -2.6%   | 4.1%    | 36.3%               | 64.6%  | -6.9%                       | -5.1%   | 54.1% | 11.9%    | 27.7%    |
| H23               | 2/23/23       | 259                  | \$ 4.020      | \$ 1.70      | \$ 0.134   | 52.8%                  | -0.2%  | -2.0%   | 4.8%    | 35.6%               | 54.7%  | -6.6%                       | -5.1%   | 52.8% | 15.0%    | 34.0%    |
| J23               | 3/28/23       | 282                  | \$ 3.323      | \$ 0.95      | \$ 0.071   | 34.1%                  | -0.2%  | 3.8%    | 1.7%    | 25.6%               | 25.3%  | 0.8%                        | 0.1%    | 34.1% | 0.9%     | 3.1%     |
| K23               | 4/25/23       | 301                  | \$ 3.259      | \$ 0.85      | \$ 0.062   | 30.0%                  | -0.3%  | 3.4%    | 0.7%    | 25.0%               | 22.4%  | 0.9%                        | 0.2%    | 30.0% | 0.8%     | 2.9%     |
| M23               | 5/25/23       | 323                  | \$ 3.303      | \$ 0.84      | \$ 0.059   | 28.4%                  | -0.3%  | 2.8%    | 0.2%    | 24.5%               | 21.1%  | 0.9%                        | 0.2%    | 28.4% | 0.9%     | 3.1%     |
| N23               | 6/27/23       | 345                  | \$ 3.355      | \$ 0.86      | \$ 0.059   | 27.8%                  | -0.2%  | 2.6%    | 0.2%    | 23.7%               | 20.1%  | 0.8%                        | 0.1%    | 27.8% | 0.8%     | 3.0%     |
| Q23               | 7/26/23       | 365                  | \$ 3.371      | \$ 0.90      | \$ 0.059   | 27.7%                  | -0.3%  | 2.6%    | 0.2%    | 23.9%               | 19.8%  | 0.9%                        | 0.2%    | 27.7% | 0.9%     | 3.1%     |
| U23               | 8/28/23       | 388                  | \$ 3.362      | \$ 0.92      | \$ 0.059   | 28.0%                  | -0.2%  | 2.6%    | 0.3%    | 24.6%               | 19.7%  | 0.8%                        | 0.2%    | 28.0% | 0.8%     | 3.1%     |
| V23               | 9/26/23       | 408                  | \$ 3.397      | \$ 0.99      | \$ 0.062   | 29.0%                  | -0.2%  | 2.4%    | 1.0%    | 25.3%               | 19.4%  | 0.8%                        | 0.2%    | 29.0% | 0.9%     | 3.2%     |
| X23               | 10/26/23      | 430                  | \$ 3.522      | \$ 1.17      | \$ 0.071   | 32.1%                  | -0.2%  | 2.8%    | 3.0%    | 24.2%               | 17.6%  | 0.9%                        | 0.1%    | 32.1% | 2.3%     | 5.1%     |
| Z23               | 11/27/23      | 451                  | \$ 3.751      | \$ 1.40      | \$ 0.084   | 35.6%                  | -0.2%  | 2.5%    | 2.4%    | 24.3%               | 16.2%  | 0.9%                        | 0.1%    | 35.6% | 2.6%     | 5.6%     |
| F24               | 12/26/23      | 471                  | \$ 3.873      | \$ 1.67      | \$ 0.097   | 39.9%                  | -0.2%  | 4.4%    | 3.6%    | 26.0%               | 14.7%  | -1.0%                       | -1.4%   | 39.9% | 6.6%     | 5.4%     |