Changes to how J.P. Morgan Securities LLC allocates exercise assignment notices for short options positions.

When the holder of an options contract chooses to buy or sell the underlying security, the Options Clearing Corporation randomly assigns the corresponding obligation to a firm that holds client accounts with short positions in the same option. Each firm, such as J.P. Morgan, must maintain guidelines for how it allocates these notices to clients.

Effective September 6th, 2024, J.P. Morgan Securities LLC will be changing the way it randomly assigns options exercise assignment notices for short options positions held in client accounts. As you were previously approved for options trading, we have attached a description of the updated random allocation process for your reference.

If you have any questions, please contact your J.P. Morgan Account Management Team.

Update of Options Lottery Methodology

J.P. Morgan Securities LLC ("JPMS") assigns short positions utilizing the "other" random allocation methodology designated in FINRA Regulatory Notice 11-35. The following step-by-step example illustrates how this methodology works.

- **Step 1:** JPMS first identifies all client and firm accounts with open short positions in an option series for which we have received exercise notices.
- **Step 2:** JPMS will assign a range of sequential numbers to each account identified in Step 1. The accounts will first be arranged in numerical order, and then assigned a range of sequential numbers based on the number of short contracts held in each account. This process continues until all accounts in the sequence have been assigned unique sequential numbers, as shown in our example below.

Account # Ending in:	# of Short Contracts	Assigned Sequential # Range	Description
1046	30	1-30	Assigned numbers 1-30, reflecting the total number of contracts in the account.
1047	30	31-60	The first number assigned must be 31, which is the next number in the numerical sequence. The final number will be 60, to account for the 30 contracts in the account.
1048	5	61-65	The first number assigned must be 61, which is the next number in the numerical sequence, and the last will be 65, to account for the five contracts in the account.

- **Step 3:** After assigning sequential numbers, JPMS will generate a random number using the following method.
 - 1. JPMS will add up all the exchange volumes to come up with the composite number

SECNBR	CUSIP	Description
Z901803	649990058	NYSE Volume
Z901439	649990074	MIDWEST Volume
Z901466	649990108	CINCINNATI Volume
Z901448	649990124	NASD Volume

2. Example

- a. Total assignment from Options Clearing Corporation on an option series: 10 contracts (Street assigned)
- b. Total Customer short position on an option series: 65 contracts (Firm positions)
- c. Composite volume: 282,431,310. It is the sum of the following:
 - NYSE Volume: Ask price for security Z901803 * 100,000
 - MIDWEST Volume: Ask price for security Z901439 * 100,000
 - CINCINNATI Volume: Ask price for security Z901466 * 100,000
 - NASD Volume: Ask price for security Z901448 * 100,000

- 3. Total length of the Composite number is determined based on the four Individual Exchange Volumes (e.g., the length of the Composite volume is 282,431,310, which is nine digits).
 - a. Subtract 5 from the total length, so the number will be (9 5 = 4). This will be the position where the number will be cut in the Composite volume.
 - b. Cut the number up to four digits starting from the position determined in Step 3a. In this case, it will be 4.313.
 - c. Divide the number in Step 3b by 10,000 and add 0.0001, so the final number will be (4,313/10,000) + 0.0001 = 0.4314.
- 4. Multiply the number in Step 3c by the total Customer short positions, and round the number by removing decimals. This determines which customer will be assigned the first hit.
 - a. For example, the total short position for the customer is as follows (accounts sorted in ascending manner to determine the hit position):

#	Account # Ending in:	Contract Quantity
1	1046	30
2	1047	30
3	1048	5
Total		65

- b. First hit position will be on 0.4314 * 65 = 28.041. Round this number down to 28.
- c. The starting point for the first contract to be assigned an exercise notice is 28, which falls within the sequential number range of 1-30 assigned to the account ending in 1046.
- 5. The distribution to hit the account will be done in the ranges as per the Customer position as follows:

#	Account # Ending in:	Range	Description
1	1046	1-30	As 28 comes in this range, the first hit will be on this account, and three contracts (28, 29, 30) will be assigned to this customer.
2	1047	31-60	The difference of 7 (10 - 3) will be assigned to this customer. This customer can absorb up to 30 contracts. If there were more than 30 contracts to be assigned, then this customer would have been assigned fully.
3	1048	61-65	If more than 30 contracts were to be assigned, the leftover would have been passed on to account ending in 1048.
Total		65	