

Protective Put Hedge Analysis: EOSE

Analysis Date: November 16, 2025

Portfolio Overview

Current Price:	\$13.80	Expected Low:	\$1.49
Shares Held:	400	Expected High:	\$26.28
Budget Target:	\$100	Annual Volatility:	109.6%

90% Price Decline Scenario Analysis

Unhedged Portfolio P/L:	\$	-4,968
Hedged Portfolio P/L:	\$	1,623
Hedge Benefit:	\$	6,591 (132.7% protection)

Recommended Hedge Positions

Optimal Put Options Strategy for EOSE

Strike	Premium	Contracts	DTE	Expiration	Cost	ITM Prob	Efficiency
\$10.50	\$0.06	4	5d	2025-11-21	\$24	95.5%	2119.7
\$11.50	\$0.23	3	12d	2025-11-28	\$69	74.0%	651.1
TOTAL	-	-	-	-	\$93	-	-

Strategy Summary

Total Investment: \$93

Total Contracts: 7

Average DTE: 8 days

Average Efficiency Score: 1385.4

Portfolio Coverage: 175%

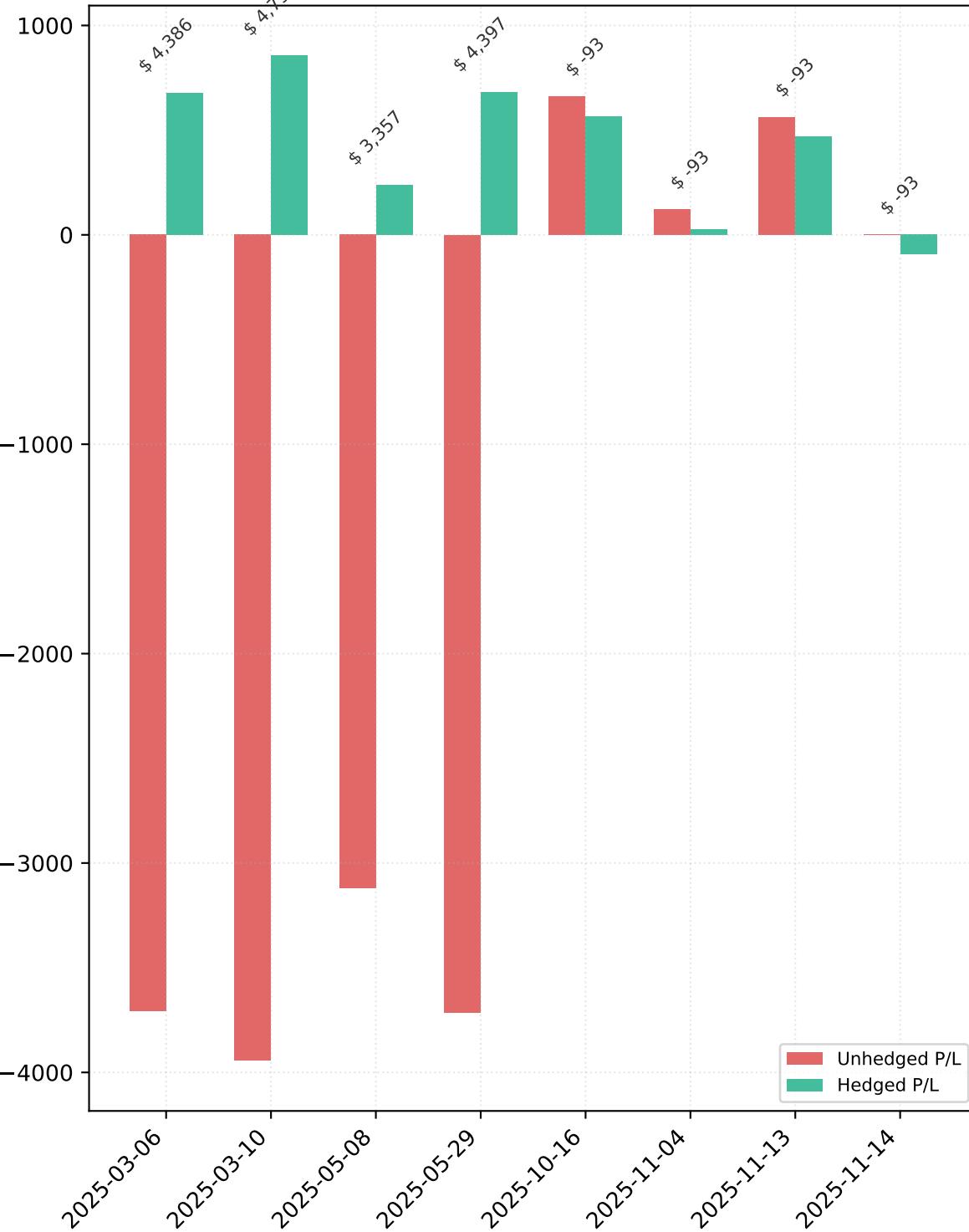
Portfolio Risk Assessment

Value at Risk & Position Analysis

Risk Metric	Value
Portfolio Value	\$5,520
Position Size	400 shares
Daily Value at Risk (1σ)	\$381
Expected Loss (90% drop)	\$4,968
Hedge Budget	\$100
Budget as % of Portfolio	1.81%

Backtest of Hedge Performance on Worst Daily Drawdowns

Historical Drawdown Backtest



Date	% Chang	Price	Unhedged	Hedged	Benefit Protection
2025-03-06	-8.85%	\$4.53	\$-3,708	\$678	\$4,386 118.3%
2025-03-10	-14.35%	\$3.94	\$-3,944	\$855	\$4,799 121.7%
2025-05-08	-10.04%	\$6.00	\$-3,120	\$237	\$3,357 107.6%
2025-05-29	-24.69%	\$4.51	\$-3,714	\$682	\$4,397 118.4%
2025-10-16	-15.48%	\$15.45	\$660	\$567	\$-93 0.0%
2025-11-04	-9.73%	\$14.10	\$120	\$27	\$-93 0.0%
2025-11-13	-11.96%	\$15.20	\$562	\$469	\$-93 0.0%
2025-11-14	-9.24%	\$13.80	\$0	\$-93	\$-93 0.0%

Downside Scenario Analysis

Hedge Performance Across Multiple Price Declines

Scenario	Price	Unhedged P/L	Hedged P/L	Benefit	Protection
10% Decline	\$12.42	\$-552	\$-645	\$-93	-16.8%
25% Decline	\$10.35	\$-1,380	\$-1,068	\$312	22.6%
50% Decline	\$6.90	\$-2,760	\$-33	\$2,727	98.8%
75% Decline	\$3.45	\$-4,140	\$1,002	\$5,142	124.2%
90% Decline	\$1.38	\$-4,968	\$1,623	\$6,591	132.7%

Figure 1: EOSE Price History with Forward Projections & Put Strikes

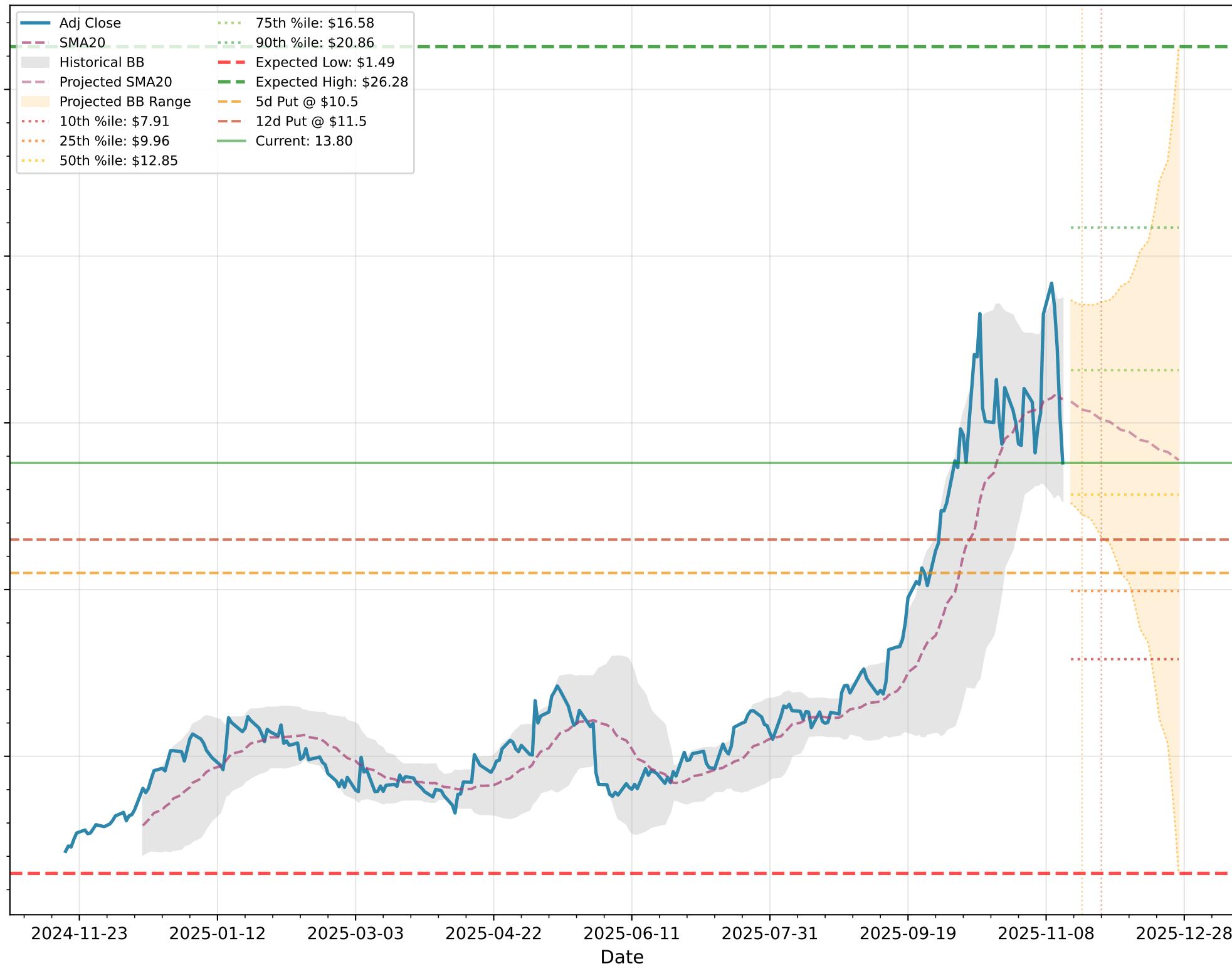


Figure 2: P/L Comparison: Hedged vs Unhedged

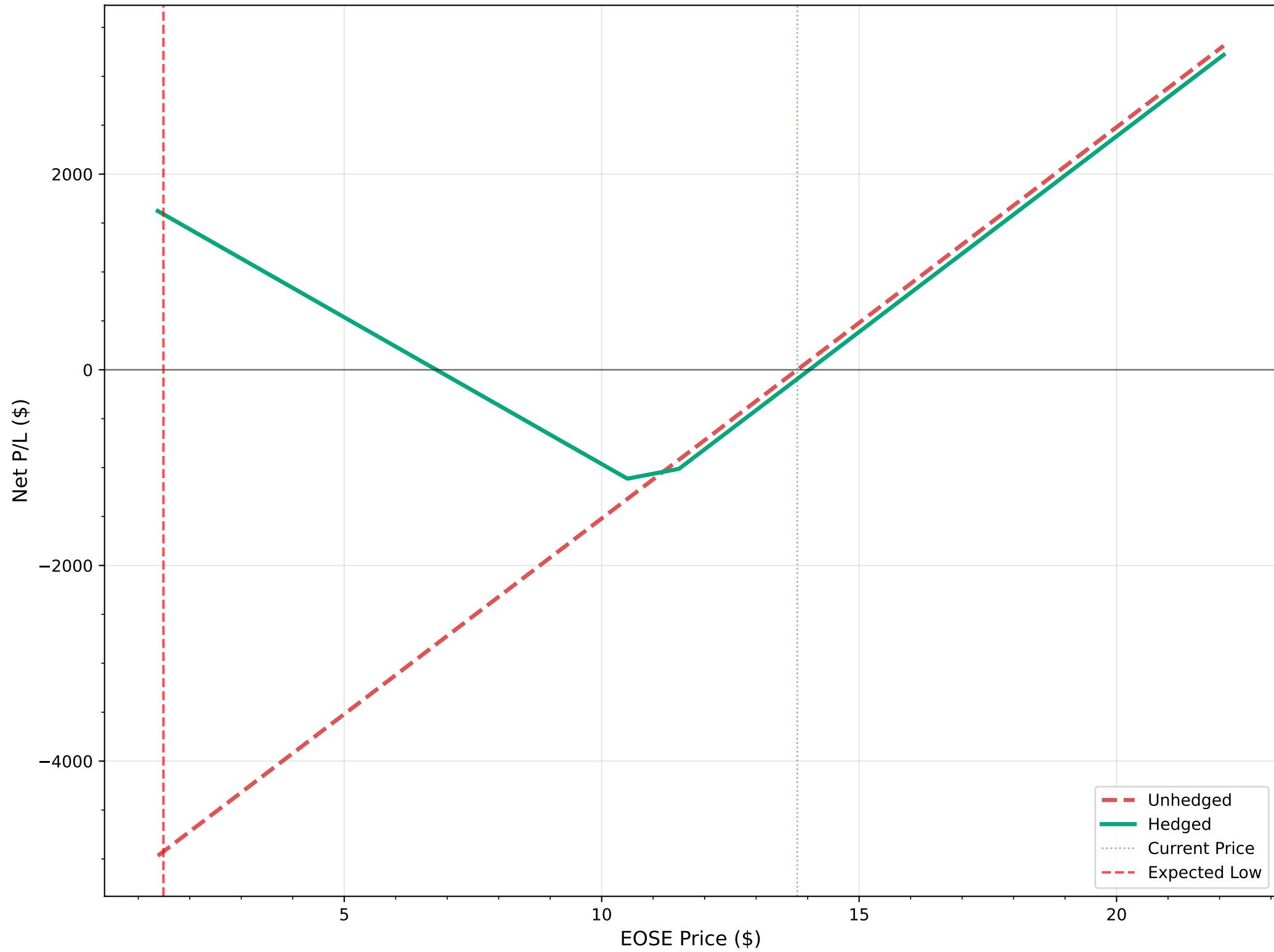


Figure 4: Put Options Efficiency Analysis

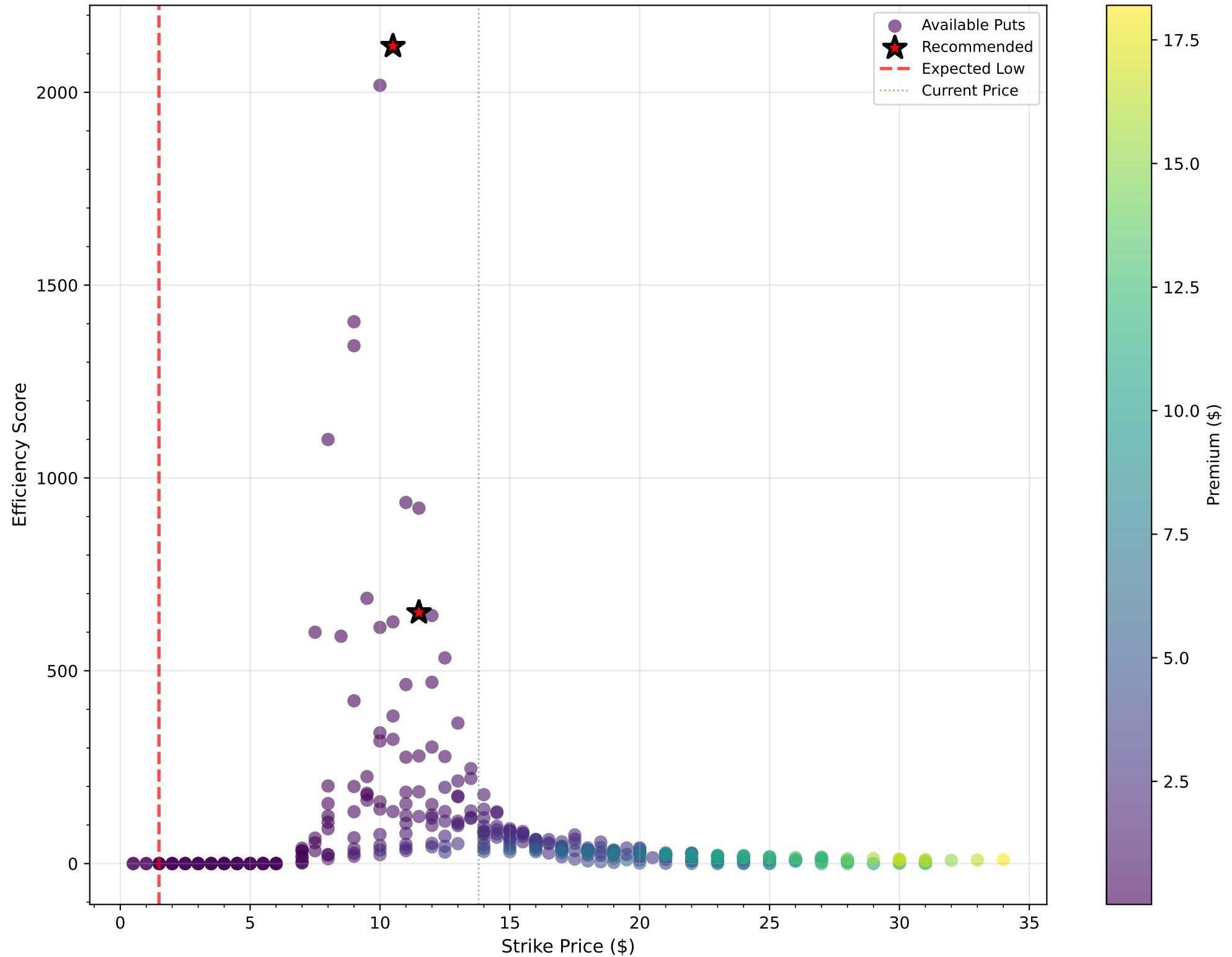
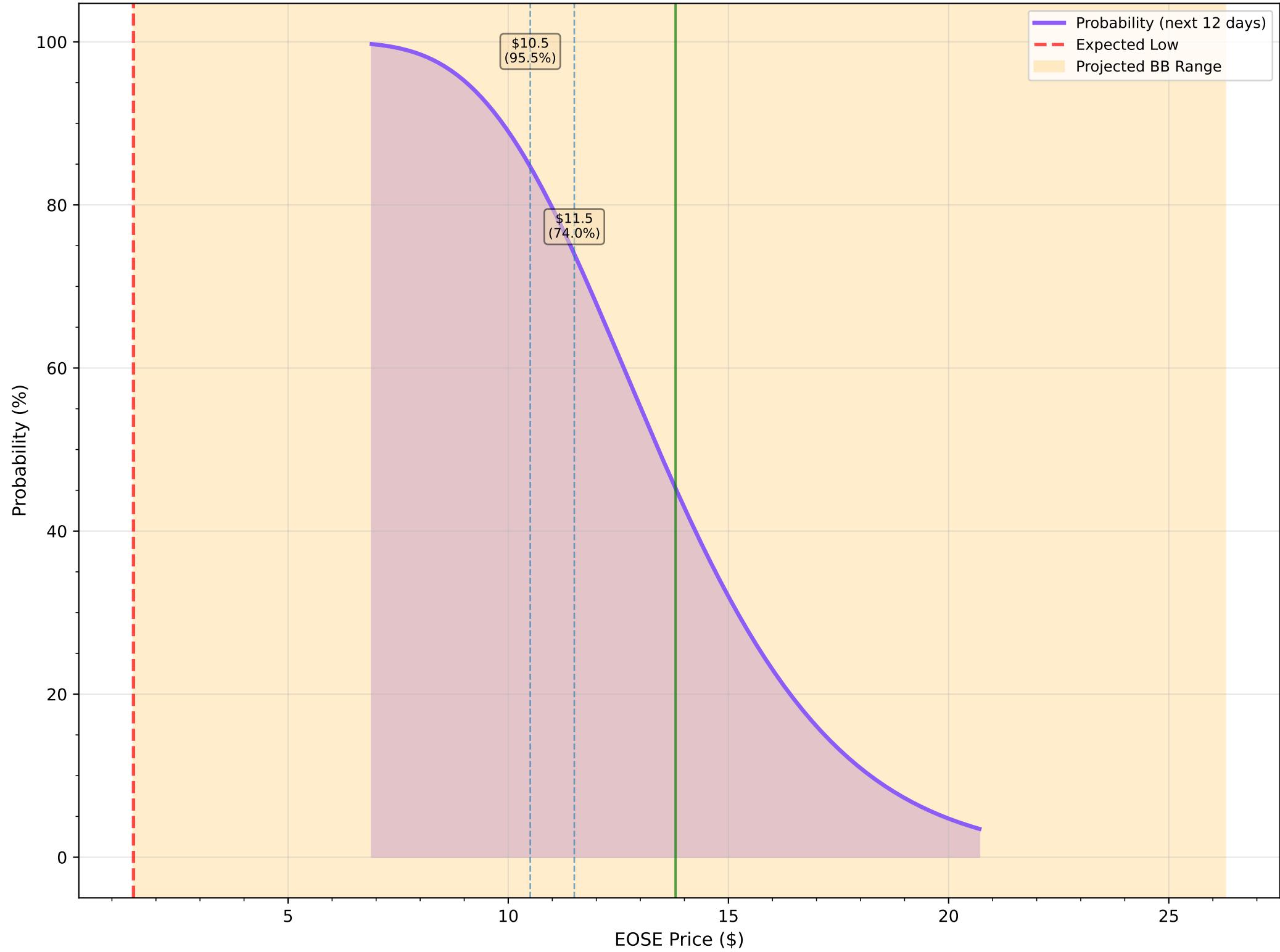


Figure 5: Probability Distribution & Put Strike Analysis



Hedge Positions: Detailed Analysis

Position-by-Position Breakdown & Performance Metrics

Position Details

Pos	Strike	Expiration	DTE	Contracts
P1	\$10.50	11/21/25	5d	4
P2	\$11.50	11/28/25	12d	3
TOT	-	-	-	7

Financial Metrics

Pos	Premium	Cost	ITM%	Value@90%	ROI%
P1	\$0.06	\$24	95.5	\$3,624	15100.0
P2	\$0.23	\$69	74.0	\$2,967	4300.0
TOT	-	\$93	-	\$6,591	7087.1

Portfolio Summary Statistics

Total Premium:

\$93

Hedge Benefit (90% drop):

\$6,591

Protection Level:

132.7%

Annual Volatility: 109.6% | Analysis based on 365-day historical data