

Power Hour Prior Sweep

Tier B funded/eval research - 10k prop validation

TRADES	WIN	PF	EVAL PASS	EVAL FAIL
86	62.8%	1.60	91.5%	8.5%

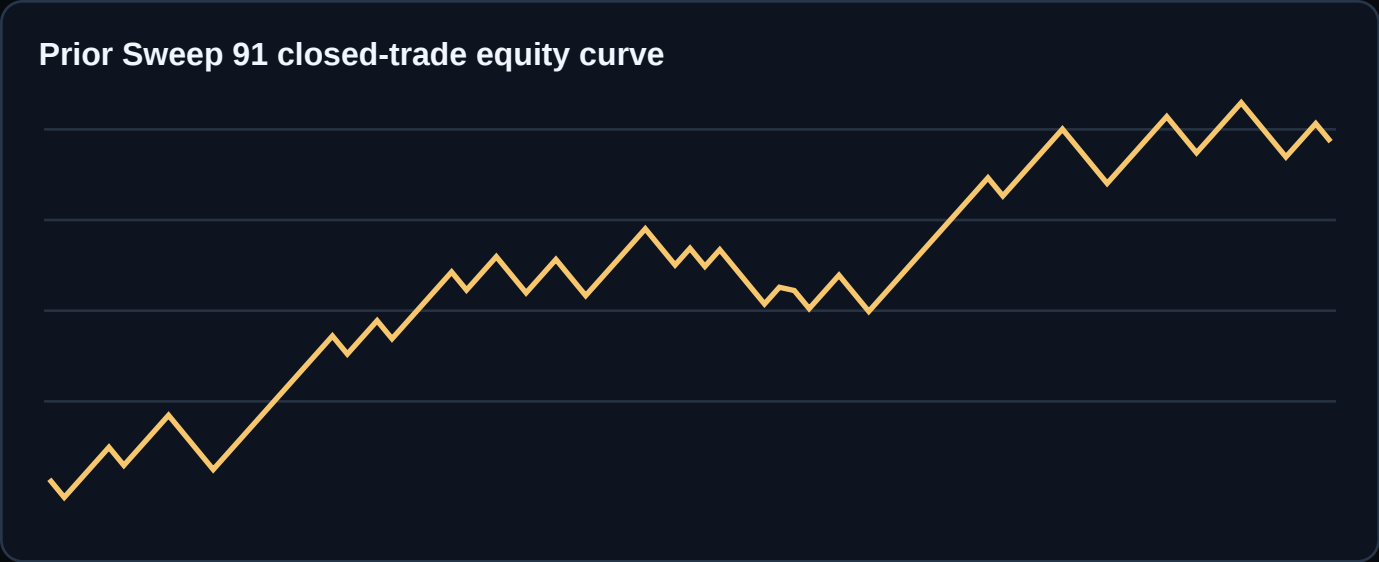
Research Thesis

A 1-minute power-hour prior-day-low sweep reclaim model with strong funded-mode survival and solid evaluation pass behavior.

Prop-Firm Reality Filter

Metric	Value	Interpretation
Evaluation pass probability	91.5%	Estimated from 10,000 Monte Carlo paths under the current Topstep-style 50K simulator.
Evaluation failure probability	8.5%	Failure is primarily max-loss/trailing drawdown before pass.
Median days to pass	26	25th/75th percentile pass window: 18/37 days.
Funded payout eligibility	100.0%	Modeled against five \$150+ winning days in funded mode.
Average max drawdown before pass	\$1,023	Useful for capital-buffer planning, not a guarantee.

Visual Evidence



Metric	Value	Why it matters
Closed trades	86	Sample size behind the public research page.
Trades per week	0.57	Expected signal cadence from this historical sample.
Win rate	62.8%	Useful for drawdown clustering and execution psychology.
Expectancy	+0.226R	Average R-multiple per signal.
Profit factor	1.60	Gross winners divided by gross losers.
Historical max drawdown	4.75R	Peak-to-valley historical R drawdown.
Holdout	24 trades / +0.127R exp	Out-of-sample direction check from the latest segment.

Explicit Entry And Exit Parameters

These are the research-grade operating rules. Platform source code and exact automation wiring are staged privately for the buyer package.

Item	Validated Rule	Execution Note
Chart	1-minute execution chart	The validated candidate is a 1-minute power-hour model.
Market	MES/MNQ micro futures	Micro sizing first because sweeps can slip around prior-day levels.
Direction	Long only	The validated candidate is a prior-day-low reclaim, not a short model.
Session	Power hour	The edge is concentrated late in RTH. Do not move it to the open without retesting.
Setup	Sweep below prior day low, then close back above it	This is a failed breakdown / liquidity sweep reclaim.
Trend filter	Price must be above EMA200	Keeps the reclaim aligned with broader trend context.
RSI filter	RSI below 52 at signal	Avoids chasing after full momentum recovery.
Entry	Closed-bar signal, next-bar/market style entry in the approximation	Backtest used next-bar replay execution.
Stop	Max of structure risk and 1.0 ATR, with minimum-risk floor	Stop is attached immediately. No averaging down.
Target	Fixed 1.0R target	Bracketed target.
Time exit	12 bars on the validated 1-minute model	Exit if neither stop nor target resolves inside horizon.
Governor	Funded add-on or patient evaluation module	Frequency is low, so it should not be the only fast-pass engine.

Risk Governor

Control	Default	Reason
Eval risk	\$100-\$150/trade in demo first; \$250 was the modeling ceiling.	The model earns a demo, not automatic max size.
Daily loss stop	-\$500 new-entry lockout.	Protects the drawdown floor and prevents revenge trading.
Daily profit lock	+\$650 new-entry lockout.	Protects passed/evaluation progress and controls consistency risk.
Max losses	Two clean model losses per day.	Stops the bot when the regime is not matching the historical edge.
News filter	Disable around high-impact scheduled news.	The replay does not prove edge during abnormal liquidity.
No stacking	One position at a time unless portfolio logic explicitly allows a reduced-risk add-on.	Keeps live path close to research path.

Fast-Pass Governor Frontier

Same signal logic, different risk dollars and daily lockouts. Faster settings are not automatically better because they increase failure pressure against the trailing drawdown.

Mode	Risk	Daily Stop	Daily Lock	Pass	Fail	Median	P75	Avg DD
Pending	-	-	-	-	-	-	-	Run optimizer

Operational read: use the best survival score for funded-mode survivability and demo testing. Use the fast-pass frontier only after signal parity is proven and only with hard daily lockouts active.

TradingView Delivery

Private PineScript approximation staged as power-hour-prior-sweep.lux.pine. It includes arrows, plotted stop/target levels, alert conditions, and session controls. It is not a TradingView public-library publication and is not an exact ATAS/MBO/DOM port.

Deliverable	Status	Notes
Pine v5 indicator	Staged privately	output/luxalgo-buyer-assets/pinescripts/power-hour-prior-sweep.lux.pine
PDF research brief	Public preview	assets/pdfs/power-hour-prior-sweep-research-brief.pdf
Automation spec	Private buyer package	Bracket entry, stop, target, governor, lockouts, and replay parity checklist.
TradingView screenshot	Pending chart QA	A chart screenshot should be captured after manual TradingView/LuxAlgo review before public sale.

Sources And Testing Protocol

The validation below is generated from local research artifacts and official rule references. It is not audited brokerage performance.

Area	Source	Test Note
Market data	Normalized MES/MNQ continuous-contract intraday bars from work/databento_validation_normalized.	Coverage checked from source CSVs: 2023-06-01 through 2026-05-29.
Replay engine	work/drawing_board_edge_hunt_20260624.py plus work/prop_alpha_expanded_tournament.py.	1-minute bars are resampled into the tested 2-minute and 5-minute execution views before signals are replayed.
Validation files	work/prop_alpha_expanded_validation_20260625 and work/prop_alpha_portfolio_validation_20260625.	Promoted candidates were rerun through 10,000 Monte Carlo prop-firm paths.
Rule template	Topstep-style 50K Combine/XFA simulator, verified from official Topstep help pages on 2026-06-25.	Includes MLL, optional DLL, contract limits, micro ratio, consistency, payout-day, and automation caveats.
Costs	\$1.24 commission per side and 1 tick slippage per side in the current simulator template.	Live fills must be audited before scaling. If costs drift, the strategy is paused.

Official Rule References Checked

Reference	URL
Trading Combine parameters	https://help.topstep.com/en/articles/8284197-trading-combine-parameters
Maximum Loss Limit	https://help.topstep.com/en/articles/8284204-what-is-the-maximum-loss-limit
Daily Loss Limit	https://help.topstep.com/en/articles/10490293-daily-loss-limit-in-the-trading-combine-and-express-funded-account
Payout policy	https://help.topstep.com/en/articles/8284233-topstep-payout-policy

Limitations

This PDF is educational research, not financial advice, not a broker statement, and not audited live performance. Results can fail in live markets due to slippage, latency, missed fills, commissions, platform behavior, rule changes, contract-roll handling, news shocks, and market-regime changes.

Forward-Test Checklist

Step	Requirement	Reject / Pause If
Demo parity	Run at least 20 sessions and compare every signal to the research logic.	Live signals drift from expected timestamps or levels.
Fill audit	Log entry, stop, target, slippage, MAE, MFE, and outcome in R.	Average live cost exceeds 1.5x modeled cost.
Drawdown audit	Pause after a new max drawdown or a new worst-day loss.	Live path breaks historical or Monte Carlo expectations.
Prop rules	Verify current firm automation, copy-trade, DLL, trailing, consistency, and payout rules.	Rules conflict with automation or payout plan.