

MES Clean Power Hour Router

Research/demo candidate for prop-firm automation. This is a router-gated MES RTH clean midday/power-hour continuation and reclaim blend using closed-bar signals, next-bar execution assumptions, immediate bracket exits, one-active-position control, and prop-style daily lockouts.

Metric	Baseline 10k Read	Interpretation
Trades	279 accepted trades	Higher frequency than the low-frequency anchor, but still not a daily scalper.
Frequency	1.80 trades/week	Usually multiple signals per month; not a market-open button masher.
Win rate	65.2%	Solid for positive-R bracket logic.
Target profile	Mostly 1.0R to 1.5R sleeves	Router combines several bracketed micro-edges under one governor.
Expectancy	+0.344R/trade	Healthy normalized edge before harsher fill-cost stress.
Profit factor	2.04	Good gross-win to gross-loss relationship in the historical replay.
Historical max DD	5.20R	Main reason this candidate is more prop-friendly than broad single-strategy searches.
Eval pass	95.2% at \$125 risk	10,000 path Topstep-style simulation; not a firm guarantee.
Eval fail	0.0% at \$125 risk	No baseline max-loss failure in the 10,000-path profile.
Median days	51 trading days	Not a five-day speed pass; designed for survival and repeatability.

Start 0.0R

End 95.9R



Prop Reality Filter

The strongest practical read is not the top-ranked missed-fill row by itself. The candidate is promoted because baseline, added-cost, and random-missed-fill stress remain positive, while drawdown failure stays low at conservative risk.



Stress	N	Win	ExpR	PF	DD	Pass	Fail	Med	Funded
baseline	279	65.2%	+0.344R	2.04	5.20R	95.2%	0.0%	51d	100.0%
+0.03R cost	279	64.9%	+0.314R	1.92	5.59R	91.2%	0.0%	55d	100.0%
+0.05R cost	279	64.9%	+0.294R	1.85	5.85R	86.6%	0.0%	57d	100.0%
miss 7 + cost	240	64.6%	+0.291R	1.83	6.01R	83.2%	0.0%	59d	100.0%
10% miss + cost	255	63.9%	+0.284R	1.80	4.88R	81.8%	0.1%	59d	100.0%
miss 5 + cost	224	64.3%	+0.289R	1.82	5.72R	80.0%	0.0%	60d	100.0%

Exact Operating Profile - Public Version

Exact thresholds remain private buyer material. The public operating profile below is sufficient for audit and risk review without exposing the complete turnkey recipe.

Area	Public rule	Automation requirement
Instrument	MES-focused micro futures router.	Start on micro sizing only. Do not translate to ES without retesting.
Chart	RTH intraday router built from 2m/5m research families.	Use closed-bar signals; no intrabar repaint or late chase.
Window	Midday plus power-hour risk windows.	Disable outside validated RTH windows.
Bias	Continuation/reclaim/failure-sweep blend with MES risk filter.	Route under one global position governor.
Entry	Closed signal, intended next-bar fill.	Cancel stale entries that miss the intended entry bar.
Stop	Immediate bracket stop from structure/ATR risk.	No stop widening, no averaging down.
Target	Positive-R bracket, mostly 1.0R/1.5R sleeves.	Take target automatically; no manual hope hold.
Daily governor	Max two trades/day in eval replay; no re-entry after daily loss state.	Hard daily stop and daily profit lock must be code-enforced.
Risk	\$125/trade eval, \$80-\$110/trade funded depending objective.	Funded mode should prioritize payout survival over pass speed.

Module Contribution

The router is a portfolio of small sleeves, not a single magic entry condition. That is why it holds up better than the broad single-strategy continuation/fade tournament that was rejected for drawdown failures.

Module	Trades	Win	Net R	Avg R
Open Drive Quality	104	66.3%	+27.6R	+0.265R
RTH Sweep Frequency Scout	76	64.5%	+25.9R	+0.341R
OR Failed Break Sleeve A	43	72.1%	+22.9R	+0.532R
Prior Sweep Reclaim Sleeve	53	58.5%	+18.7R	+0.353R
MPS_72f259c691	3	66.7%	+0.8R	+0.266R

Evaluation Mode Versus Funded Mode

Mode	Recommended risk	Goal	Stop/lock behavior	Current read
Evaluation	\$125 per accepted trade	Pass efficiently without rule breach.	Max two trades/day, stop after daily loss, no stale fills.	95.2% baseline pass, median 51 days, p95 DD about \$834.
Evaluation - cost stressed	\$125 per accepted trade	Survive realistic added friction.	Same governor, +0.05R modeled extra cost.	86.6% pass, still near-zero modeled rule failure.
Funded	\$80-\$110 per accepted trade	Preserve payout eligibility.	Use lower daily aggression and strict kill switch.	Baseline funded payout reads near 100.0% at the modeled risk.
Do not use	Mini contract scaling	Speed at all costs.	None.	Not approved. Scaling before live fill logs invalidates the research.

Kill Criteria

Trigger	Action
Live/paper slippage exceeds modeled cost by 1.5x for 20 trades	Pause and rerun stress with actual fill data.
Two full model losses in one day	Stop trading that day.
Any missing bracket attachment	Immediate automation halt.
High-impact scheduled news inside active window	Disable entries until news cooldown model is verified.
Daily drawdown reaches 40%-50% of prop daily limit	Stop entries and preserve account.
Prop firm rule changes	Refresh simulator before next challenge attempt.

Audit Trail And Status

Area	File or source	Purpose
Router tradebook	work/rth_frequency_scout_gate_replay_20260628/trades_midday_plus_clean_power_hour_mes__eval_2trade_110.csv	Accepted trades used for baseline metrics.
10k stress summary	work/rth_gate_router_stress_clean_powerhour_mes_10k_20260629/rth_router_gate_stress_summary.csv	Monte Carlo pass/fail, stress, and risk rankings.
Rejected broad search	work/prop_alpha_timewindow_continuation_fade_pulse_20260628	Confirmed vwap_snap single-strategy candidates had too much prop failure risk.
Rule simulator	work/prop_alpha_lab.py	Topstep-style 50K template with daily loss, max loss, payout, commission, slippage, and lockouts.
Data source	work/databento_validation_normalized	Normalized MES/MNQ continuous-contract intraday bars used by the research lab.

Current Status

Promote as a Tier B/A research-demo candidate. It is stronger than the low-frequency sweep page for frequency and stronger than the rejected vwap_snap continuation run for prop-firm survival. It is not approved for unattended live automation until the IBKR/automation adapter records clean demo fills, stale cancels, bracket attachment, and daily lockouts.

Risk Notice

This document is educational trading research and software documentation, not financial advice, investment advice, or a brokerage performance statement. Backtests and Monte Carlo simulations can fail because of fills, slippage, latency, fees, platform behavior, user execution, rule changes, and market regime shifts.