

Reference Panel Specification

Jason St George · companion to *AfterFiat v2.6* Red Line 14 · 2 September 2026 · afterfiat.xyz

This document is a public good independent of the thesis it serves. The panel it specifies a frozen list of compute venues, scraped daily, with a published workload-to-instance mapping is useful for pricing comparisons whether or not any part of the AfterFiat thesis survives. Implement it, fork it, or ignore it; the reading is yours either way.

1. What this panel measures

Red Line 14 of the AfterFiat thesis needs one number from outside the protocol: $P_{W,t}^{\text{byp}}$, the lowest publicly quoted USD price to execute a workload’s computational content *without* protocol-grade verification, on the same hardware class. That number answers a question broader than the thesis: **what does unverified compute cost, and in which direction is it moving?**

Three things make this a measurement problem rather than a lookup:

- **List prices are not transacted prices.** Committed-use discounts, reserved instances, and spot markets routinely clear well below on-demand rates. A panel scraping list prices measures a bypass channel nobody uses.
- **Venue mix is a choice.** Which providers count as “the alternative” determines the answer before any scraping begins. That choice must be made before the readings start, and cannot be changed quietly.
- **The mapping is load-bearing.** A canonical workload must map to specific instance types at each venue, and that mapping ages as hardware generations turn over. It must be versioned like any other spec.

2. Panel constitution

Panel v1.0 pre-committed

Venues: three hyperscalers (AWS, GCP, Azure) and three GPU marketplaces (Lambda, RunPod, Vast.ai), selected at specification time and frozen.

Reading rule: for each workload $\times$ venue cell, the reading is the *lowest generally available* price across published pricing modes (on-demand, reserved, committed-use, spot), recorded with its mode.

Custody: maintained by a party other than any fee recipient of a protocol being scored. Initially the author; designed for handoff to a neutral custodian.

Change protocol: panel changes require publication and 90 days’ notice. No quiet venue swaps. Removed venues stay in the archive; archived readings are never deleted.

Scrape cadence: daily. Raw scrape artifacts retained, timestamped, and published alongside the derived series so any third party can re-derive every reading.

Workload-to-instance mapping: a versioned machine-readable spec (JSON Schema) mapping each canonical workload to instance types per venue. Mapping version increments on any change; derived series record the mapping version used.

3. Canonical starter workloads

Workload	Tier	Content
MATMUL_ n	A/B	Deterministic FP32 matrix multiplication at pinned dimensions
INFER_LM_7B	B	7B-parameter model inference, honestly-graded assurance
PROOF_GEN_ k	A	ZK proof generation for a circuit of pinned size
MEDIA_PROV	A	Media provenance attestation for a reference asset

Where a venue cannot express a workload (e.g., no ZK prover offering), the cell reads n/a and is excluded from the capacity-weighted aggregate never imputed.

4. Derived series

The panel publishes, per workload and aggregated capacity-weighted:

- $P_{W,t}^{\text{byp}}$ the reading itself, with pricing mode recorded
- The **workload unit-price index** capacity-weighted average USD price of the canonical basket; the deflator Red Line 14 Condition B uses
- Per-venue readings and their dispersion
- Spot/on-demand spreads, as a stress indicator

5. What this panel does not do

- It does not observe **negotiated enterprise rates**, which are published nowhere. The reading is an upper bound on the true alternative; Red Line 14's bias analysis (v2.6 §27) derives why this direction is the benign one for the trip wire it feeds.
- It does not measure **verification cost** (γ). That is drawn from FER and VERIFYPRICE telemetry under its own custody rules, because it enters the wedge negatively and the fee recipient has the incentive to understate it.
- It does not score any protocol. It publishes prices. The comparison is the reader's.

6. License and contact

Panel spec and derived series: © 2026 Jason St George, CC BY 4.0. Fork it, implement it, publish rival panels a contested reading is a healthy reading.

Implementations, corrections, and custody offers: stgeorgejas@gmail.com.