

AssureIQ

Turnaround Assurance & Credibility for Asset-Intensive Operations

An independent verdict on whether your shutdown programme is credible — before it starts and after it ends.



EXECUTIVE SUMMARY

AssureIQ judges whether a turnaround programme is credible. It does not run the shutdown — it independently verifies the schedule, the resourcing and the evidence behind it, and delivers a Readiness Verdict before work starts and a Post-Turnaround Review once it ends.

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A deterministic critical-path scheduling engine with Monte Carlo risk simulation and earned-value analysis, fully reproducible run to run.
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A four-truths ledger that keeps baseline, contractor-reported, engineer-validated and client-confirmed data separate — disagreements stay visible, never averaged away.
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A joint engineer-and-client walkdown workflow with evidence capture, so the verdict is agreed in the field, not asserted from a spreadsheet.
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Governed overrides on every recommendation — authorised users may bypass anything, but nothing changes silently.



Joint walkdown: engineer and client, one shared record



WHAT ASSUREIQ DELIVERS

- 1

A pre-turnaround Readiness Verdict, with blocking findings shown ahead of any score
- 2

A Post-Turnaround Review reconciling planned versus actual
- 3

An optional in-flight second opinion between the two
- 4

Schedule integrity auditing across contractor, EPCM and client submissions
- 5

Feasibility checks across crew, equipment and long-lead constraints
- 6

A reproducible, seed-logged Monte Carlo schedule-risk model



WHY IT MATTERS ACROSS SECTORS

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Turnarounds and shutdowns concentrate cost, safety and production risk into short, high-stakes windows, across mining, energy, manufacturing and process industries alike
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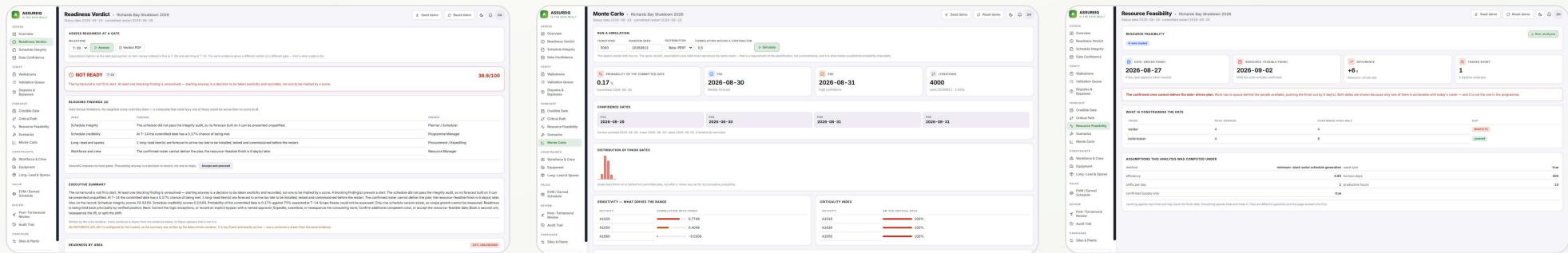
Multiple contractors, EPCMs and client teams routinely each report a different schedule truth
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A credible verdict has to be independent of whoever is under schedule pressure
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Runs standalone from imported schedule files, or federates with existing site systems

Two Verdicts. One Credibility Layer

AssureIQ turns schedules, walkdown evidence and cost data into a single, defensible verdict on turnaround credibility — before the tools come out, and again once the plant restarts.



- 1 Readiness Verdict – T-minus scorecard
- 2 Monte Carlo schedule-risk simulation
- 3 Resource feasibility check

READINESS LENS

1



Critical path integrity
Deterministic CPM forward/backward pass with assumption-matched comparisons

→ Is the network sound and comparable run to run?

2



Schedule risk simulation
Monte Carlo modelling with logged seed, config and engine version

→ How much finish-date risk does the plan actually carry?

3



Cost-performance integrity
CPI produced only where real actual cost exists; hours-based ratios suppressed

→ Can this cost figure be trusted as CPI?

4



Feasibility constraints
Crew, equipment and long-lead checks against confirmed supply only

→ Is the plan resourced, or just dated?

5



Flexible plant hierarchy
Sites, plants and units modelled as data, not code

→ Can a new plant be added without a rebuild?

6



Governed overrides
Every bypass logged with reason, evidence and forecast impact

→ Who changed what, and why?

POST-EVENT LENS

7



Joint walkdown record
Engineer and client sign off in the field, with evidence attached

→ Is the finding agreed, or still disputed?

8



Four-truths reconciliation
Baseline, contractor, engineer and client positions kept separate

→ Where do the parties actually disagree?

9



Planned-versus-actual review
Reconciled schedule and productivity harvest after restart

→ What really drove the outcome?

10



Validated productivity rates
No rate carried forward without a validated observation

→ Which benchmarks are safe to reuse next turnaround?

11



Blocking findings
Shown ahead of any weighted score, whatever the score says

→ Is there a reason not to proceed, regardless of the headline number?

12



Narrative assembly
Facts assembled from evidence first; narrative renders them, never invents

→ Can this verdict be defended line by line?



Assurance Built for the Realities of the Plant

15%+

maintenance cost reduction across the AI Asterion platform

24/7

real-time operational visibility

1 System

single credibility layer above every other tool



GOVERNANCE YOU CAN TRUST

- 1 No hard gates — AssureIQ warns, scores and recommends; it never blocks work
- 2 Every override stores the original value, replacement, reason, evidence and timestamp
- 3 Disputed remains a valid, visible terminal state — disagreements are never merged
- 4 The approved baseline is immutable; scenarios store deltas against it
- 5 AI extraction is advisory only — it can never overwrite an engineer's validated data
- 6 Coverage gaps are disclosed on every screen, never shown as a false clean pass



WHAT ASSUREIQ DELIBERATELY WON'T DO

- ✓ Run the shutdown itself — that stays with the execution team and TurnSure
- ✓ Certify payment, quality release or restart authorisation
- ✓ Score an unresourced or unassessed input as a clean pass
- ✓ Average away a disagreement between contractor and client data

Built for Every Asset-Intensive Sector

From mining to energy, manufacturing and process industries, turnarounds and shutdowns sit at the sharp end of operational value — concentrated cost, safety exposure and production risk inside a fixed window.

WHY IT MATTERS ACROSS SECTORS

-  Multi-contractor turnarounds are the norm across mining, energy and process plants, with EPCM, contractor and client teams each keeping their own schedule.
-  AssureIQ's four-truths ledger keeps those positions distinct instead of quietly reconciling them into a single, unverifiable number.
-  A flexible plant and site hierarchy scales across multi-site, multi-plant operations without a system rebuild.
-  The platform runs standalone from imported schedule files, so a site can start with AssureIQ alone and federate with TurnSure, CrewOptix or AssetVault later.



One credibility layer, shared across every party on site



A CREDIBLE TURNAROUND IS ONE EVERY PARTY CAN DEFEND. ASSUREIQ MAKES THAT VERDICT INDEPENDENT, EVIDENCED AND REPRODUCIBLE.