

Is your critical path real, and does it reach the in-service date you promised?

The integrated schedule is the one artifact the sanction rides on. CAP·SAR works it in full with a calendar-aware CPM engine and hands your team a prioritized correction plan before the baseline locks at sanction, while the logic can still be fixed.

- Deep analysis in. A short, prioritized plan out.

— THE PROBLEM

Most project schedules get baselined because they look complete.

A schedule with broken logic is a paper map in a nice frame: it shows the route but cannot tell you the bridge ahead is out. Most project baselines lock at sanction without anyone stress-testing the logic underneath, and the failures that move an in-service date hide there in plain sight.

PATH THAT MISSES THE FINISH

The critical path dead-ends short of the in-service date

A PROCUREMENT GAP

A delivery date on the plan that nothing drives

A WINDOW NOBODY BOUNDED

In-window scope not fenced by the outage

— A CPM ENGINE, NOT A CHECKLIST

01 • PROCUREMENT CHAIN

The order behind the delivery

Every long-lead item traced from IFC through the purchase order to receipt on site.

02 • LONGEST PATH

Reach to the in-service date

The driving chain traced back from the business milestone, through the window, and how far it reaches through real work.

03 • CONTINGENCY

Reserve, measured

Planned duration separated from the real reserve to the date you committed to.

ENGINEERING
IFC drawings

PROCUREMENT
Exchanger order

DELIVERY
On site

WINDOW
Tie-in & install

RECORDS
MC & PSSR

BUSINESS PROMISE
In service

We trace the driving chain backward from the **in-service date you committed to**, not the network's latest bar. Illustrative: the path runs through procurement into the tie-in window and reaches the promise. When it dead-ends in level of effort or a payment milestone instead, the critical path is not real, and we flag it.

Where the duration comes from

Illustrative

Reserve to the committed date

Illustrative

Logic 12.1 mo

Leveling +2

Planned 12.6 mo

serve 6

— WHAT YOU GET

IN
Your P6 schedule



ENGINE
CPM + core + extension



OUT
Correction plan + workbook

A prioritized correction plan, each finding mapped to its fix, plus the line-by-line repair workbook, before the baseline locks. Standalone, or the schedule engine inside CAP·AR3. At closeout, CAP·SPR traces the defects flagged here to the days they cost.

— EVERY CHECK WE RUN · THE SHARED CORE, PLUS THE PROJECT EXTENSION

Check		What it catches	
Configuration & integrity			shared core
A1	Scheduling settings	The scheduling options are set so the forward and backward pass can be trusted.	
A2	Calendars	Work patterns are real, and no calendar quietly runs more hours than its name implies.	
A3	File & status integrity	One data date, clean actuals, nothing corrupting the calculation.	
Network logic			shared core
B1	Open ends	Every activity has something driving it, so a slip actually propagates.	
B2	Dangling logic	No activity tied on only one side, hiding its true impact on the finish.	
B3	Relationship types	Finish-to-start dominant; overlaps modeled honestly, not by convenience.	
B4	Lags	Delays built into the logic are justified, not padding the plan.	
B5	Leads / negative lags	No negative lags papering over missing sequence detail.	
B6	Hard constraints	Dates driven by logic, not pinned by constraints that mask the real risk.	
B7	Redundant & circular logic	No loops or duplicate ties distorting the calculated path.	
Float & critical path			shared core
C1	Negative float	The plan is achievable as drawn, not already behind on day one.	
C2	Unexplained high float	No activity floating longer than the whole project with no reason it should.	
C3	Critical-path validity & reach	The critical path is continuous, real, and reaches the in-service date you promised.	
C4	Near-critical & merge exposure	The paths about to become critical, and the points where many converge, are visible.	
C5	Float distribution	The criticality profile is sane, not a network with no real spine.	
Durations & milestones			shared core
D1	Activity durations	No oversized activities hiding sequence, detail, and risk.	
D2	Level of effort	Hammocks and LOE are bounded, not silently inflating the critical path.	
D3	Milestones	Gates, mechanical completion, PSSR, and in-service milestones are structured and tied on both sides.	
Resources, leveling & density			shared core
E0	Leveling state	Whether the schedule was resource-leveled, determined forensically from the file.	
E1	Resource loading	The work that should carry crews and hours actually does.	
E2	Assignment integrity	No broken, zero-unit, or impossible resource assignments.	
E3	Leveling coherence	The leveled dates and the underlying logic agree with each other.	
E4	Resource density	The manpower curve is physically achievable, not a wall of parallel work.	
Coding & traceability			shared core
F1	Code completeness	Phase, area, system, discipline, and package coding present, so the plan can be sliced and audited.	
F2	WBS structure	A clean, meaningful hierarchy, not empty scaffolding.	
F3	Traceability	Activities tie back to work packages and purchase orders and carry unique, legible names.	
Project extension			capital projects
P1	Engineering & procurement logic	Issued-for-construction before fabrication, purchase order before delivery, delivery before install: the sequence the field actually depends on.	
P2	Gate milestones as anchors	G3, G4, mechanical completion, PSSR, and in-service exist as milestones, tied on both sides, and the plan re-lays from them.	
P3	Cost & resource loading	The baseline carries the hours and the money the control estimate says it does, so earned value can be read against it later.	
P4	Milestone-payment linkage	Payment milestones tie to real completion, not to dates a contractor can hit without finishing the work.	
P5	The window fragment	On a coupled project, the in-window scope is bounded by the window start and end, and the pre-window work is verified complete before it.	
P6	Permit & weather windows	Seasonal and permit constraints are modeled as what they are, not as constraints that mask the real driver.	

Gate 1 · Configuration
Engine settings valid, so the dates can be trusted.

Gate 2 · Real critical path
Continuous, real work, reaches the in-service date.

Gate 3 · Status integrity
One data date, clean actuals.

— BEYOND THE CHECKS · THE NUMBERS A CHECKLIST CANNOT PRODUCE

SIMULATED RISK
P50, P80, and the odds
Thousands of runs down the driving path.
Illustrative: P50 14.1 mo, P80 15.3 mo, 61% odds of a fourteen-month commitment.

NEAR-CRITICAL
What to watch next
The chains about to become critical, ranked by days of work per day of protecting float: delivery, window, cutover.

VERIFIED FINDINGS
Survives a challenge
A numeric wall, then an adversarial verifier argues against every finding. Refuted findings never render.

Run an independent engine over your schedule.
Send us the P6 file for the project you are taking to sanction. We will show you what to fix before you lock the baseline.

Book a call

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