Remaining Useful Life: knowing when, not just what

Turning failure detection into decision time

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The problem

Wind farm O&M teams are drowning in responsibility, but starving for decisions

Blunt Derate

Faulted turbines derated by a fixed amount 24/7. Costing revenue during high-price periods, wastes capacity during low-price periods.

No Revenue Link

O&M teams cannot quantify financial impact of decisions. Asset managers discover underperformance at year-end.

Fragmented Tools

CMS, APM, SCADA, CMMS, weather, and price data live in separate systems. Planners manually aggregate 5+ sources.

Reactive Decisions

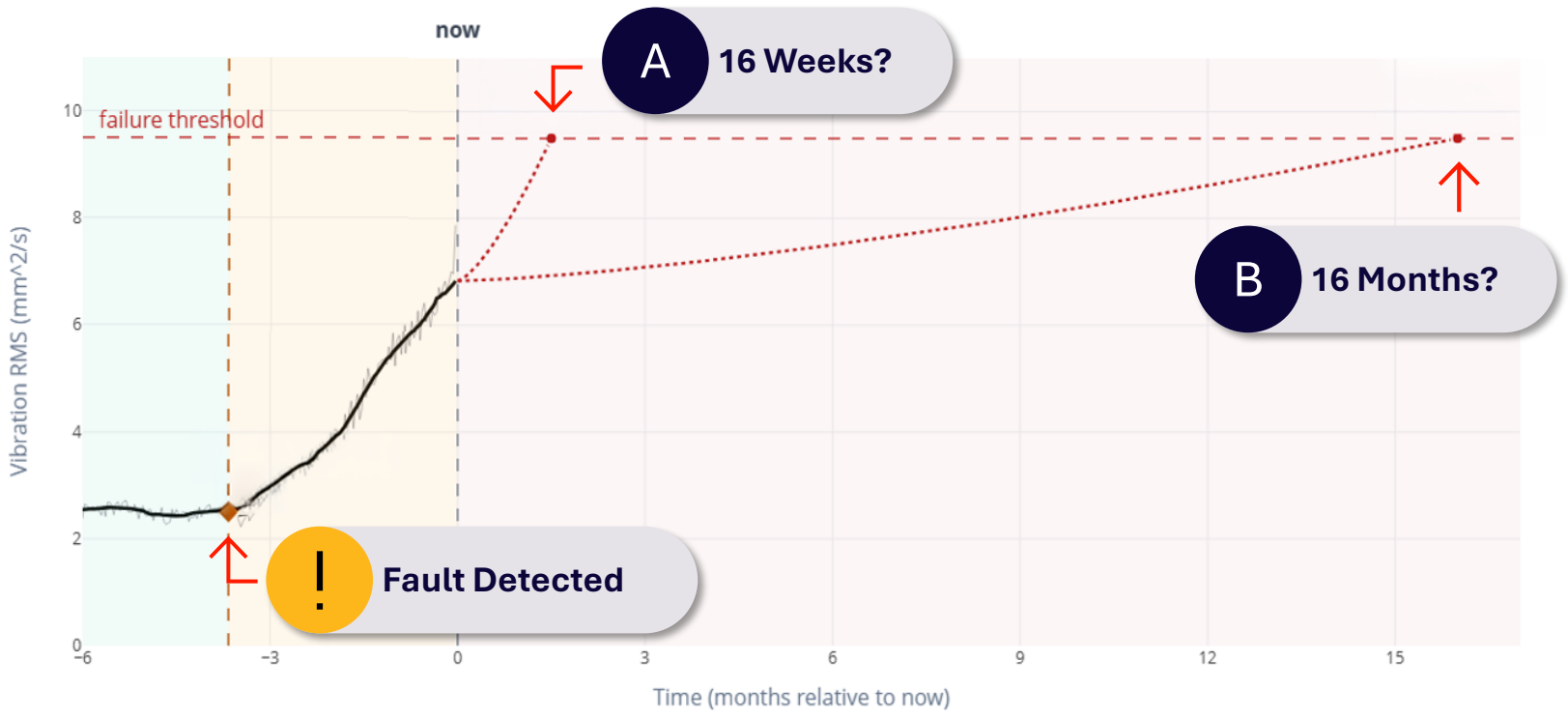
Maintenance scheduled by calendar and gut feel, not financial optimisation. Weather, logistics, and prices are afterthoughts.



Time.

The one thing **detection** doesn’t give you.

Why nobody can give you a date.



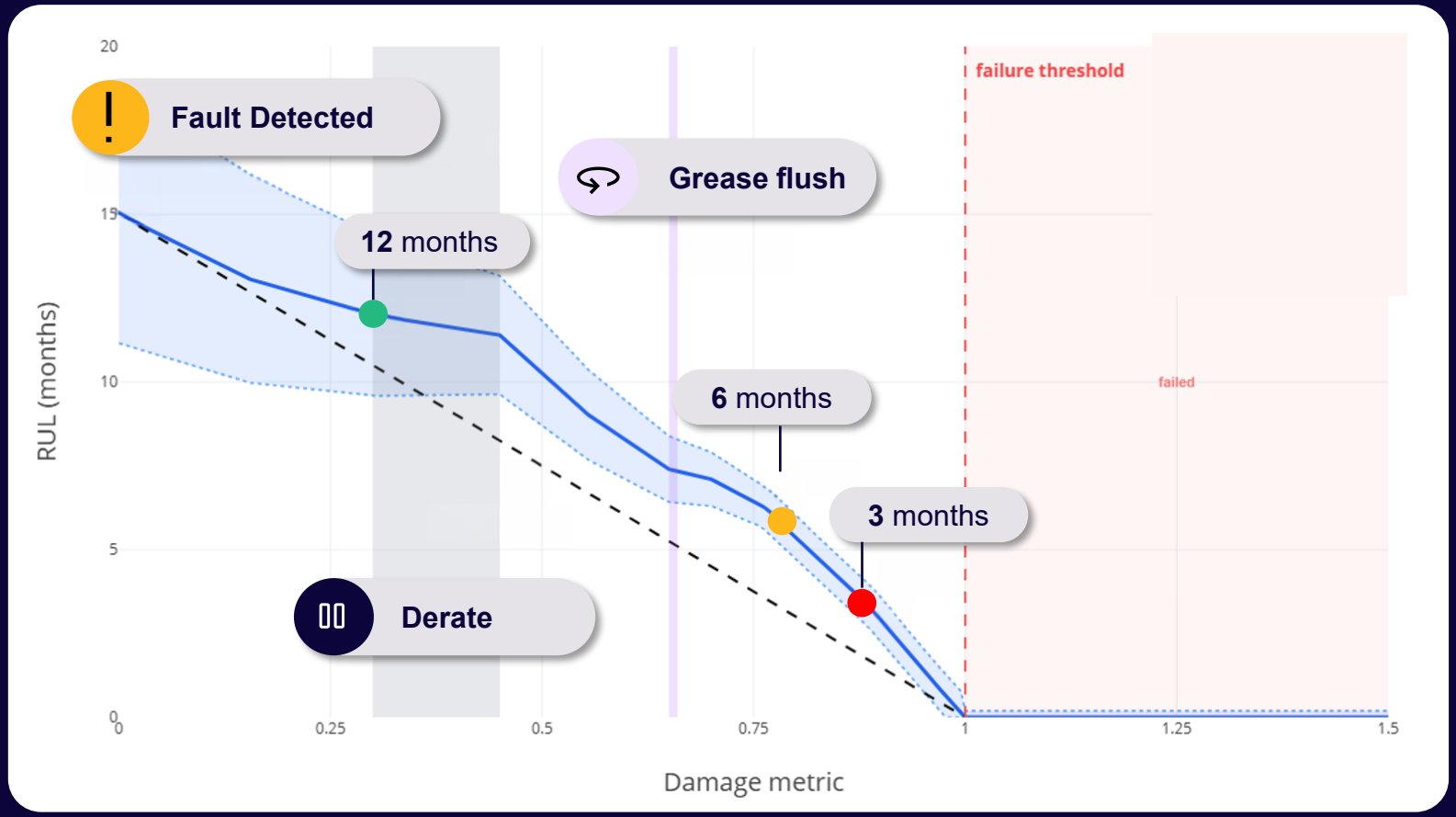
Operational changes

Different failure modes

Different environmental conditions

What RUL looks like

3, 6 and 12-month forecasts, each with a P10–P90 confidence band.



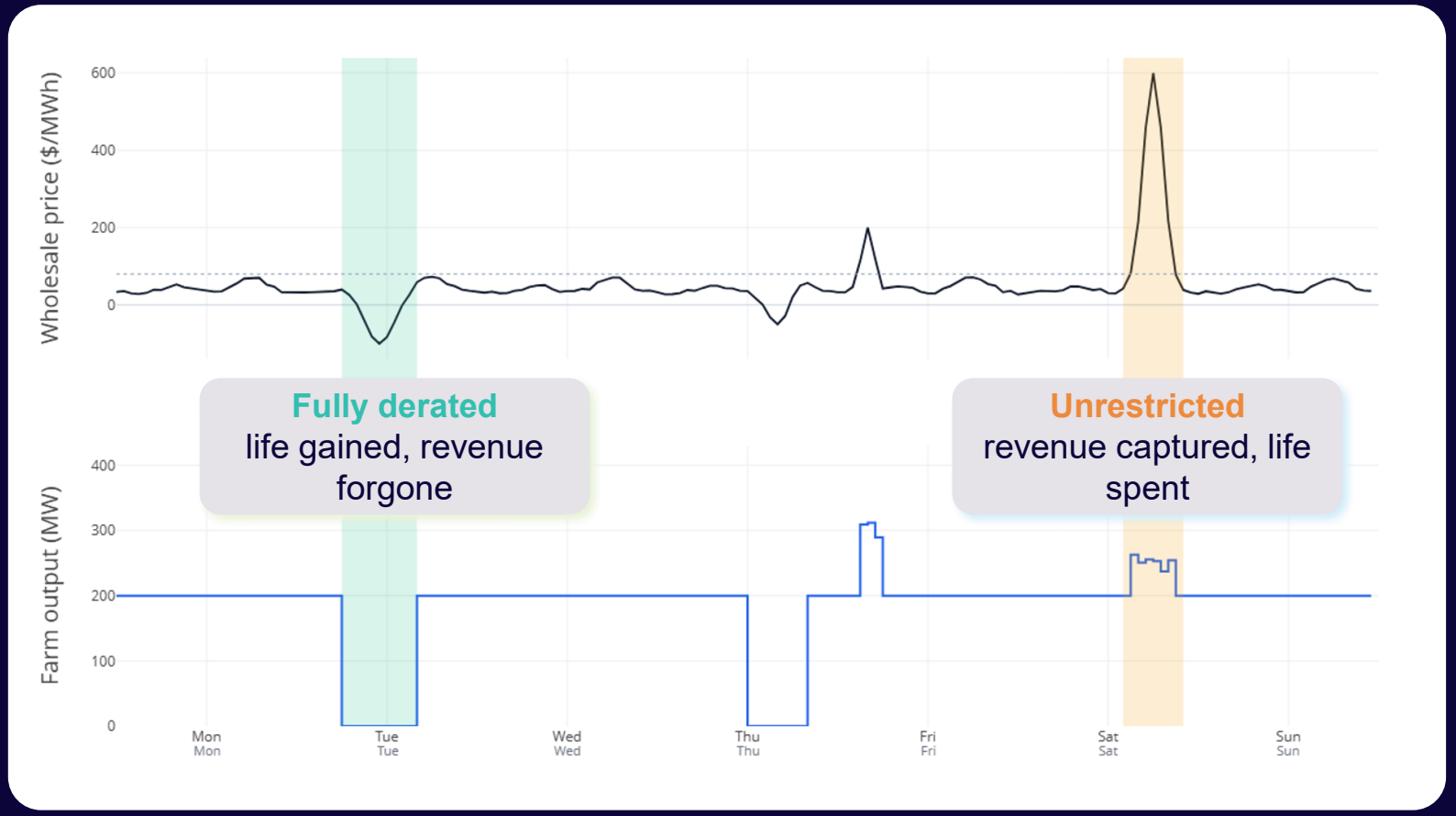
20+ years
monitoring data

50,000+
failure events

180+
turbine platforms

The derate trade

Today this is a binary. That is what leaves generation on the table.



Extend component life

Capture peak revenue

Optimise the trade, turbine by turbine

Condition Based Performance Management

cortex by ONYX

ONYX Insight

Turn condition into revenue. Optimise around RUL, maintenance timing, derate decisions and the financial impact

Dynamic Curtailment
Protect revenue in high-price periods instead of derating around the clock.

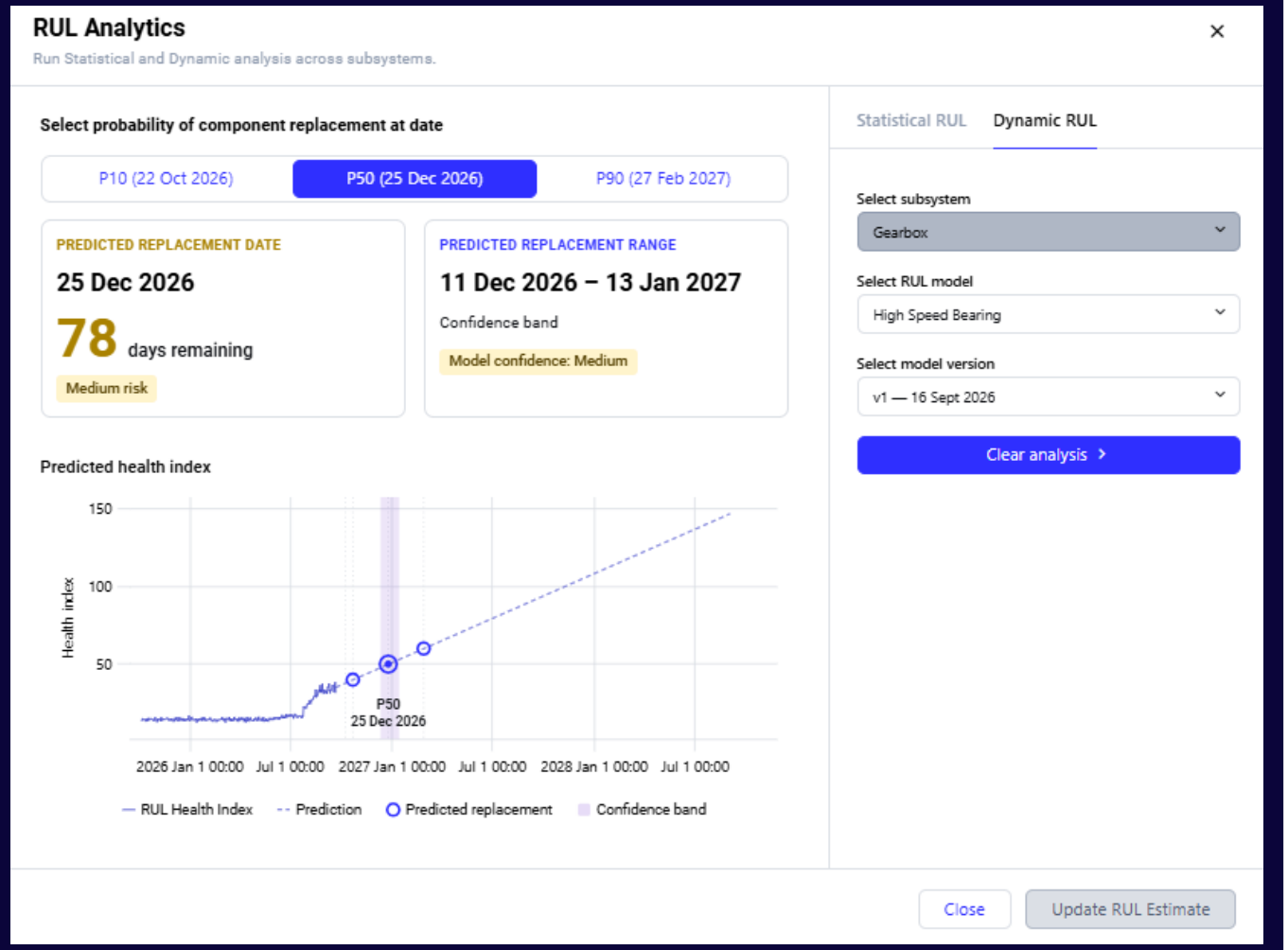
Dynamic RUL
See remaining life reflect your decisions when you derate or intervene, not stay fixed until the next inspection

Derate and Maintenance Optimisation
Factor in budget, RUL, weather, logistics, parts and revenue, not just a calendar date.

Asset Integrity Dashboard
See the financial view of asset condition.

2-20%

recoverable revenue potential on turbines with a known issue



Where this goes next

Detection, then time, then the generation you are leaving behind

01



Detect it

CMS tells you a component is degrading.

02



Time it

RUL tells you how long you have, given how you are running the asset.

03



Recover it

Next: find the generation you are giving away, without adding risk.

Let’s talk

Offices

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USA
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