

ENERGY & UTILITIES

Maintenance economics beyond the prediction score

For oil, gas and utilities, a useful prediction must lead to a safe, feasible and economically justified intervention.

THE EXECUTIVE FINDING

A more accurate alert does not automatically produce a better maintenance decision. Asset criticality, operating windows, crews and parts determine whether the information can be used.

THREE DECISIONS FOR LEADERSHIP

- 01** Choose an asset class with usable history and a named engineering owner.
- 02** Measure preparation effort separately from outage duration and field work.
- 03** Validate the IT/OT boundary and test the response to unreliable telemetry.

THE TRADE-OFF TO EXAMINE

Too many alerts can consume scarce engineering capacity; too few may conceal degradation. Review missed issues and overrides as well as precision. Evaluate each asset class under representative operating conditions before expanding.

HOW GENELLIPSE CAN HELP

Genellipse can connect permitted historian, asset and maintenance information with GeneData, use Cortex AI to prepare source-linked work packages and apply GeneSecure controls at the agreed boundary. GeneAnalytics can track review effort and maintenance outcomes. Scope begins with one asset class and an engineering-approved evaluation.

THE ANALYSIS IN ONE VIEW

The full intervention workload

illustrative effort hours | Synthetic example

Evidence preparation		8
Engineering review		5
Planning and permits		7
Field execution		12

8 + 5 + 7 + 12 = 32 hours; the model targets preparation, not engineering or safety authority.

Synthetic work-package example. These are labour hours, not elapsed outage duration or an estimate of failure probability.

INTERPRETATION

For a 32-hour work package, halving eight hours of evidence preparation releases four hours. It does not halve an outage or reduce the 12 hours of field execution. Whether the change improves availability depends on when the package becomes ready and whether a maintenance window exists. The economic test should include preparation, review, false-alert work and platform operating cost.

SOURCES AND METHOD

Original Genellipse analysis informed by the primary sources below. Examples are synthetic, not customer results, forecasts or industry benchmarks. Sources reviewed 14 October 2026.

IEA - Energy and AI (2025)

Read the complete report and its assumptions at genellipse.com/insights

Discuss your priorities: info@genellipse.com