How Falkonry helped predict failures and avoid downtime of generators

Generator failure or performance degradation

Insufficient warning time

Unplanned downtime

Customer impact costs

Degraded output

Loss of revenue

So, how to get advance warning, avoid customer impact & loss of revenue?
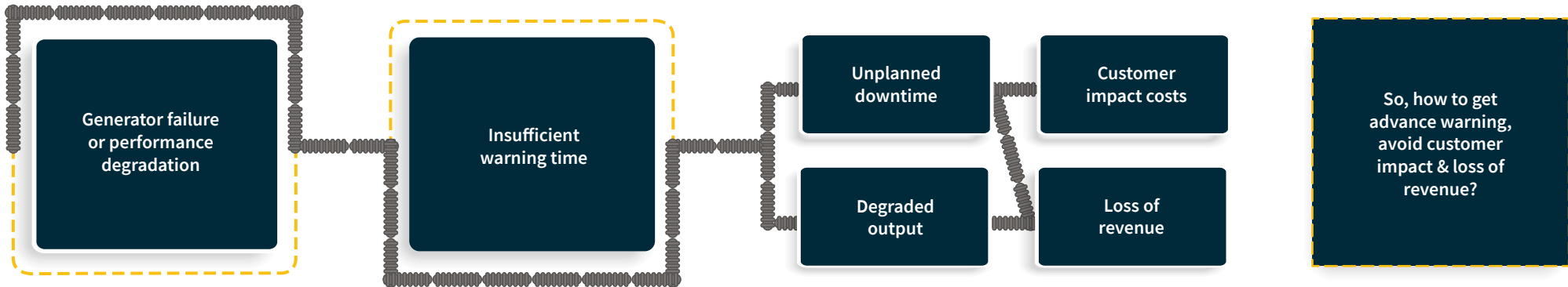
Microgrids serve two purposes:

• During periods of high electricity demand, microgrids can compliment the power provided by electric utilities. Usually these are peak load hours and electricity is at its highest price.

• During power outages, they can be the main source of backup power to customers who cannot afford to lose power.

When providing backup power, **unplanned downtime impacts the customer,** who incurs losses of revenue or inventory items such as frozen food. These costs result in back charges to the microgrid operator.

When supplying the grid on periods of high demand, unplanned downtime also results in **loss of revenue**.

Performance degradation happens when the generator is not able to supply its maximum rated output. This condition results in revenue losses since the microgrid operator is not able to sell all it can potentially produce.

Using Falkonry Clue, the customer is able to learn normal operational patterns for a large fleet of generator sites. Deviation from normal patterns are given as warning sufficiently in advance to be able to schedule a repair during scheduled downtime periods.

Learning was achieved in "days" (not months) after the Falkonry Clue solution was placed in service.