

CUSTOMER CASE STUDY

Proactive Check Valve Monitoring with Seeq

BKOAI helps operators protect critical assets by monitoring check valves—key components that prevent reverse flow and support system safety

Industry: LNG

GOALS

- Improve visibility into check-valve condition and performance.
- Detect potential reverse flow, leakage, and degradation earlier.
- Support proactive inspection and maintenance decisions.
- Reduce the risk of unexpected check-valve failures.

CHALLENGES

- Compressor trips, emergency shutdowns, and temperature changes can create conditions that cause reverse flow.
- Repeated exposure to these conditions can accelerate check-valve wear and increase the risk of failure.
- Limited instrumentation can make valve leakage and degraded performance difficult to detect.
- Operators need a consistent method for identifying potential problems and prioritizing maintenance.

SOLUTIONS

- Use Seeq to monitor available operating data and identify conditions associated with check-valve leakage or degraded performance.
- Detect abnormal behavior early and provide operators with information to support investigation.
- Generate reports that connect valve-performance indicators with maintenance and operational priorities.
- Provide a repeatable monitoring workflow that can be applied across applicable check valves.

RESULTS

- Improved visibility into check-valve condition and performance.
- Supported earlier investigation of potential leakage or degradation.
- Helped maintenance teams prioritize inspections and corrective action.
- Reduced the risk of unexpected valve failures and associated operational disruption.

EXECUTIVE SUMMARY

BKOAI helps operators protect critical assets by monitoring check valves—key components that prevent reverse flow and support system safety. Using Seeq, operators can monitor available operating data for conditions associated with leakage or degraded performance, detect abnormal behavior earlier, and connect valve-performance indicators with maintenance and operational priorities. The workflow improves condition visibility, supports earlier investigation, and reduces the risk of unexpected valve failures and operational disruption.

Why Check-Valve Monitoring Is Difficult

Compressor trips, emergency shutdowns, and temperature changes can create reverse-flow conditions. Repeated exposure accelerates wear, while limited instrumentation can make leakage and degraded performance difficult to detect.

Using Seeq for Repeatable Monitoring

Seeq monitors available operating data for conditions associated with check-valve leakage or degraded performance. The workflow detects abnormal behavior early, supports investigation, and generates reports that connect valve-performance indicators with maintenance and operational priorities.

Earlier Investigation and Better Maintenance Prioritization

The monitoring approach improves visibility into check-valve condition, supports earlier investigation of potential leakage or degradation, and helps maintenance teams prioritize inspections and corrective action. This reduces the risk of unexpected failures and associated operational disruption.

www.BKOAI.com · © 2026 BKOAI. All rights reserved.