

Gas Measurement Has Key Role In Sarbanes-Oxley Law Compliance

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Despite new leadership at the Securities & Exchange Commission and increasing pressure from businesses to ease enforcement, the Sarbanes-Oxley law is likely to continue keeping CEOs up at night for the foreseeable future. And that makes for restless nights for anyone who reports to America's chief executives.

Heightened public demand for corporate accountability and increased regulatory scrutiny of the accuracy and integrity of financial data have prompted many energy companies to tighten financial controls, strengthen external reporting and review corporate governance structures. They have discovered that practices related to measurement of production volume, gas quality and delivery transactions play a crucial role in accurately recording revenue and reporting financial results.

In fact, experience has shown that the natural gas measurement function serves as the foundation for Sarbanes-Oxley compliance.

As a result, pipeline companies are increasingly seeking comprehensive solutions to their gas measurement, control and analysis needs. Turnkey solutions provided by highly skilled pipeline maintenance specialists ensure that services such as measurement asset maintenance, volume/flow control maintenance and gas laboratory analysis are performed at a consistently high level of quality.

Data Management Is Key

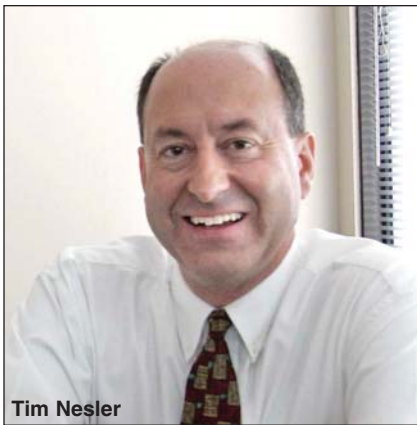
Due to the overwhelming amount of data streaming out of pipelines on a daily basis, the oil and gas industry has a particularly complex compliance challenge. Measurement of production volume, gas quality and delivery transactions are getting special attention in reviews of processes and controls. Since meters are like a pipeline company's cash registers, accurate measurement with auditable supporting data is critical for Sarbanes-Oxley compliance.

The slightest anomalies already cost pipeline companies millions of dollars annually. Under Sarbanes-Oxley, problem data could also mean stiff fines and even possible jail time for executives.

Section 404 of Sarbanes-Oxley requires chief executives and financial officers to file Internal Control Over Financial Reporting Periodic Reports. It requires management to document and assess the effectiveness of their internal controls over financial reporting and attest that their companies' financial statements are accurate.

Essentially, they are putting their careers on the line by vouching for the processes that surround data collection — down to the transaction level.

They need to audit and verify each step in a transaction, from order, to payment, to storage of data, to aggregation into financial reports.



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Readiness Checklist

Before the next round of Sarbanes-Oxley audits, companies with natural gas pipeline operations can further ensure they are in compliance by reviewing the following key points. Companies that can't answer with 100% certainty that their pipeline operations are up to these standards may face increased scrutiny come audit time:

- Assured that data is accurate and that there are no gaps in the data;
- Capable of near real-time balancing and can quickly pinpoint sources of lost and unaccounted for gas and accurately assess amount lost;
- Have necessary security controls in place and able to make critical reports readily available across organizational disciplines;
- Have detailed audit tracking on configuration and volume data;
- Able to keep track of active records and access all inactive records;
- Have central auditable database of measurement volumes and modification log;
- Can validate data against user-defined limits and historical data;
- Have operator change logging;
- Able to automatically calculate BPO (blowing, purging and other uses); and
- Can automatically recalculate upon discovery of operational discrepancies.

As David Bucknall, CEO of KWI explained in his white paper, "Sarbanes-Oxley: Challenges and Achieving Compliance through Technology," there are three key issues in the regulation: disclosure control, internal control and timeliness. Sarbanes-Oxley seeks to eliminate executive vagueness about internal operations and subsequent financial statements.

Pinpointing Lost Gas

A good example of the type of vagueness that Sarbanes-Oxley is intended to address is

lost-and-unaccounted for (LUAF) natural gas. While the law does not require reducing LUAF gas, it does require an accurate accounting of the amount of gas that is lost.

Leading pipeline transportation companies have been investing for years to reduce lost gas through improved gas measurement control practices. While these investments were intended to reduce costs, they have the unintended effect of aiding in Sarbanes-Oxley compliance.

EMS has addressed this requirement through advances in our PGAS gas measurement software that have made it possible to pinpoint the source of LUAF gas by supporting multi-level balance configurations (up to 10 levels) with date-effective assignments for each level. It automatically calculates the balance results and saves the calculations within the database. Additionally, the pre-calculated balance results can be accessed by downstream accounting systems.

These improvements offer measurement technicians rapid access to valuable operational data that can assist with the identification of equipment malfunctions and gas measurement errors. Moreover, by identifying problems along the pipeline, gas producers and transporters can minimize losses and expedite solutions. Additional best practices being implemented in order to find and mitigate LUAF gas include:

- Monitoring system balances: Technologies that enable near real-time system balancing are growing in importance. They allow field technicians to concentrate their investigation of potential LUAF gas to quickly identify potential problems.
- Meter testing/inspection: Routine calibration of meters ensures accurate measurement. Meter testing refers to inspections that may identify mechanical issues or foreign material in the meter tube that affect the measurement.
- Gas sample collection and analysis: The process of collecting gas samples, laboratory analysis, and reporting of the components contained in the gas stream.
- Valve maintenance: An ongoing program of proper valve maintenance is needed to ensure valves operate without loss of gas through leaks.

Considerations For Data Security

While Sarbanes-Oxley is not specifically related to information technology (IT), the financial reporting processes of most organizations are driven by IT systems. Most companies have moved to electronic management of data, documents and key operational processes. Therefore, IT plays a vital role in internal control.

Indeed, it is unthinkable that an executive would sign off on the validity of data if the systems maintaining it weren't secure.

Strong authentication and the use of encryption are strongly advised.

However, there are too many information systems and corporate processes to lock them all down. For instance, missing data or a small mistake in any of thousands of manual procedures can create inaccuracies throughout the financial reporting process.

At a fundamental level, gas measurement software should have stringent user authentication and login procedures. It should have operator change logging that records the person responsible for data edits and the times changes are made. It is also advisable to implement detailed audit tracking on configuration and volume data.

Keeping secured daily records of gas measurement provides individual accountability, problem analysis, intrusion detection and, most importantly, the ability to reconstruct events. Companies turn to a series of reports to keep closer tabs on operational output.

Other Considerations

The Need for Speed. Section 409 of the

Sarbanes-Oxley Act requires reporting companies to disclose information to the public "on a rapid and current basis." For instance, disclosures of "material events" must be filed within two days. The allowed time to file quarterly reports falls to 35 days this year. Annual reports will have to be filed within 60 days of the close of the year rather than 75. Gas measurement systems that offer always-on summarization capability eliminate the need to wait for the monthly close and ensure that everyone from the field technician to the corporate accounting team has access to the same information.

Expertise in the Field. While technology can play an important role in bringing an organization into compliance with Sarbanes-Oxley, the role of highly skilled pipeline maintenance specialists can't be overstated. Consistent processes and workforce standards are essential to provide an auditable set of parameters for data and to ensure accounting accuracy. Among other benefits, having a team of top experts in the field helps ensure that meter and communications equipment are designed, installed and maintained to correctly

interact with all measurement software.

It is not easy to comply with Sarbanes-Oxley. Just ask any of the more than 500 companies that have reported deficiencies in their internal accounting controls under Section 404 of the law. With a requirement that smaller companies achieve compliance by the end of 2005, the number of companies which report deficiencies is likely to expand exponentially.

The key to compliance for pipeline companies is the often overlooked and under-appreciated gas measurement function. As companies tighten financial controls, strengthen external reporting and review corporate governance structures, they are discovering the crucial role played by measurement of production volume, gas quality and delivery transactions in accurately recording revenue and reporting financial results.

With their careers on the line, it is essential that chief executives have the utmost confidence that services such as measurement asset maintenance, volume/flow control maintenance and gas laboratory analysis are performed at a consistently high level of quality. *PE&GJ*