



Enabling Asset Excellence

Safety & Business Improvement for Utilities via Near Real-Time KPI Management

Making the case for sustained investment in process safety can be difficult in the current economic climate. However, history reminds us that the financial, human and reputation costs of a major incident far outweigh any savings that might be made when finances are tight. Incidents of critical failure with major processing plants and assets have unfortunately been occurring for many years. As we move further into the 21st century an increased focus is being placed on ensuring that Utility companies operating major assets are doing so in a responsible manner. Legislation and regulation, once reserved mainly for the world's developed economies is now common place across the globe, with the need to provide environmental monitoring and protection, safe working environments and robust containment and incident management procedures.

Solution

Effective process safety is the by-product of two distinct activities – excellence in asset management as portrayed by adherence to standards such as PAS 55, and through the development of performance indicators to give improved assurance of control over major hazard risks – as documented in the HSE's HSG 254 guidelines.

"Amor Group's industry consultants helped us to define and document all our core process safety KPIs whilst their experienced software development team allowed us to create a best-of-breed technical KPI dashboard solution which fully integrates with our existing IT infrastructure, and allows us to monitor our progress in near real-time."

Martin Sedgwick, Head of Asset Management, ScottishPower

Features

- Holistic process improvement approach to the implementation of a Process Safety Management System specific to the business
- Pragmatic use of existing IT infrastructure to ensure a cost effective solution
- Consultative application of HSG 254 to the identification of asset-based risks and the definition of leading and lagging KPIs
- Fully automated KPI dashboard solution presents calculated key performance indicators at all levels throughout the organisation

Benefits

- Improved assurance of control over major hazard risks
- Establish governance and review process that minimises human and financial risk
- Reduction in operations and maintenance costs
- Reduced annual insurance premiums
- Increased plant availability
- Reduced Equivalent Forced Outage Rates (EFOR)
- Transition from corrective to preventative maintenance culture



Solution

Utilising over 20 years experience across all facets of the Energy industry, Amor Group has developed ProcessSafety+, a business process improvement initiative for asset-based organisations, such as those found in the Utilities marketplace.

The ProcessSafety+ methodology focuses on identifying the maturity of an organisation's approach to process safety, working to enable rapid deployment and implementation of a Process Safety Management System. This is achieved by defining and capturing leading and lagging people, plant, process and environmental indicators which are measured and presented using an automated KPI dashboard.

This dashboard can be used to provide near real-time access to KPIs at all levels throughout the organisation, aggregated at the appropriate level for each specific staff member. The dashboard is highly configurable, allowing the full organisational structure to be represented and covers all key areas of regulatory guidance such as PAS 55, HSG 254 and RR 509.

Track Record

Through Amor Group's approach to process safety, ScottishPower were able to transform their organisation into one of the leading global exponents of process safety, proven in their recent award for innovation in process safety from the IChemE and one of the first case studies being produced jointly by the HSE.

ScottishPower has realised significant improvements across the business both in terms of asset management, production efficiency and bottom line contribution, including:

- 29% reduction in Operations and Maintenance costs;
- 22% increase in Plant Availability;
- 50% reduction in Equivalent Forced Outage Rates (EFOR);
- 10% reduction in Annual Insurance Premium.

Now, more than ever, the need for effective process safety governance and oversight is paramount through every process-based organisation. This is further evidenced by an increased desire from boards and senior management teams to gain access to near real-time information on key asset performance indicators and on a desire to define and roll-out measures to identify and track key leading and lagging indicators.

