Pipeline Operations
Real-Time Operations Management

INTRODUCTION
During the past several years, pipeline operation costs have more than doubled with emissions inspection requirements overloading the operations teams and their ability to take advantage of market conditions. Soaring operations and energy costs, and a growing demand for emissions inspections, require pipeline operations to achieve very high throughput rates while improving energy efficiency, safety, and reducing emissions levels. During which, pipelines are continually facing greater availability challenges.

Operations costs have become one of the largest variable costs of pipelines. In most pipelines, operating costs change significantly in real time as market and weather conditions cause major changes in energy efficiency. Real-time performance measurement has emerged as one of the major challenges. There is a need to determine how fast and accurate operation financials can be processed to support pipeline fees and agility within the market place.

Many initiatives and offerings that are available focus directly on throughput, operations cost, and energy management, with most involving large expenditures that may not drive results for a year or more. Industrial executives are continually looking for new approaches to operations management that are more aligned with today’s business environment.

Real-Time Operations Management is based on a simple four-component model (see image below) designed to match the demanding requirements of industrial operations.

PART OF AN ENTERPRISE APPROACH
Real-Time Operations Management addresses specific operations management issues that drive immediate bottom line value within pipeline operations. Various operations management programs are currently available in the market today, and Invensys’ Real-Time Operations Management complements these programs and increases their overall effectiveness in the industry.

By using an effective operations management program from Invensys, pipeline operations can keep pace with the speed and demand of today’s changing business environment.
Real-Time Operations Measurement
• Model-based, real-time measurement of throughput by product, energy, and cost accounting
• Key performance indicators at each import, transfer, or export point in the pipeline or group of pipelines
• Asset-wide, real-time inventory, linepack, emissions, efficiency, and maintenance cost accounting with contexts from the ERP and Supply Chain Management systems

Real-Time Operations Empowerment
• Multi-level, role-specific intelligence views that empower personnel
• Robust, real-time forecasting and prediction of impending events, especially for market and environmental compliance changes
• Role- and condition-based alerts and adaptive collaboration guided by supervisors and specialists
• Real-Time Operations Intelligence that delivers a 2% average increase in throughput and decreases operations costs by up to 5%

Real-Time Operations Control
• Increase throughput of up to 4%, increase utilization by more than 2%, and reduce energy by more than 12% per year
• Invensys Consultants specialize in maintenance, energy, remote collaboration, and safety improvements. They analyze current safety and control strategies and recommend specific actions that drive improvement with a projected value for each action.
• Invensys Delivery specialists team with client engineering to implement improvements

Real-Time Operations Optimization
• Proactive guidance allows users to make informed decisions about conflicts, such as short-term & long-term throughput and energy
• Invensys Consultants analyze current operational strategies, business plans, and operations culture, and recommend decisions and actions to drive and measure the value of each improvement
• Improvements from Real-Time Operations Control and Optimization deliver additional reductions in energy cost from 2-5%
Real-Time Operations Management
Contextualized within Enterprise Operations Management

CORPORATE OPERATIONS MANAGEMENT

Technical Services
Supply Planning
Marketing
Investment Planning

Corporate Planning
Pipeline Operations
Emissions Reduction
Energy Planning

Earn CER From CDM
Risk Management
Contract Management

Invensys Real-Time Operations Management

Real-Time Operations Optimization
Real-Time Operations Empowerment
Real-Time Operations Measurement
Real-Time Operations Control