



# Improving Pipeline Profitability

at Iroquois Pipeline Operating Company

» success story

## THE CHALLENGE

Both power plants and distribution companies in the Northeastern United States depend on Iroquois Pipeline Operating Company for the safe and dependable delivery of natural gas. Its line stretches 377 miles from the Canadian border to Long Island, New York—providing a critical link between Canadian supply and Northeastern U.S. demand. Though a relatively small operation, Iroquois has steadily increased capacity to meet regional markets since the company's 1992 start-up.

But with this increased demand, the Northeast U.S. offers ever-increasing competition and service standards. Iroquois had successfully positioned itself to provide superior service. But service expectations were climbing; customers insisted on more and more forewarning and transparency when it comes to operational downtime and other line issues. They wanted more than just gas. They wanted value—value in the form of better efficiency, smoother integration into their own workflows and lower overall cost.

In addition to the need to maintain high service standards and increase value to customers, Iroquois had to improve its ability to compete in the marketplace. Industry-wide, the pressure was on to do more with fewer resources. Iroquois's operational costs were

appropriately significant for a company its size.

New leak detection regulations near New York City threatened to complicate costs. And the resources required to maintain adequate emergency response were mounting. But how could they lower costs and maintain service levels at the same time?

## THE SOLUTION

Iroquois's answer was to leverage IT spending in a way that optimizes assets through real-time and decision-focused technology. They invited three companies, including Energy Solutions, to bid on a real-time model that could warn controllers of impending issues on the line and help them avoid or anticipate service disruptions—and reduce operational costs. Energy Solutions dominated.

The proposed solution, PipelineManager, helps over 500 companies worldwide make better business decisions while improving profitability, efficiency and customer satisfaction. The online, simulation-based suite of applications was designed to provide operators with the information they need to run at peak efficiency and profitability. Its components included real-time pipeline modeling, real-time hydraulic profiles, tools for capacity management, pressure monitoring and product tracking, as well as advanced functionality designed to model the pipeline's hydraulic behavior.

Iroquois leverages PipelineManager and PipelineStudio to reduce planning time by 95 percent while maximizing throughput, saving fuel and improving competitiveness.

PipelineManager was designed to help optimize throughput, line pack, and fuel usage. And it was engineered with tools to detect and locate leaks, track scrapers and pigs, as well as give the volumetric or mass content needed to accurately assess capacity. Iroquois had already succeeded in improving throughput using Energy Solutions's PipelineStudio (PipelineManager's offline counterpart for pipeline design, planning and analysis). Now it was ready to use PipelineManager's integrated, Web-enabled capabilities to further improve service levels and business value.

### THE RESULTS

Iroquois controllers will use PipelineManager to increase compressor fuel savings, reduce costs and pass the value on to shippers.

Energy Solutions's offline solution, PipelineStudio, has already helped Iroquois's staff reduce planning time up to 95 percent while maximizing throughput. It even determines the best way to expand pipeline capacity—creating as much as 10,000 decatherms of capacity daily. And Iroquois uses PipelineStudio to speed delivery of studies to the marketing team. But as an offline solution, it can't harness the additional value of real-time decision-making.

Now PipelineManager's online, real-time pre-

dictive models will protect system integrity and anticipate events before they become problematic. "PipelineManager will solidify our ability to tightly control the pipeline and recognize trouble," notes Iroquois Supervisor of Planning Rick Stiffler. "For example, when deciding to turn compressors off and on, we just take an educated guess. But with the online model, we'll have a snapshot of the real-life pipe, projecting up to two hours out and getting an accurate estimation of the system status—much more informed and responsive."

"Of all the solutions we evaluated, Energy Solutions did the best job of making the online model user-friendly," said Iroquois's Stiffler. "It's exactly the type of simplified user interface functionality we need to maximize capacity, promote informational transparency and improve efficiency."

Mr. Stiffler adds: "PipelineManager warns us of impending problems. It gives us valuable insight, and gives our gas controllers different tools for identifying problems on the pipe and increasing fuel efficiency to save our shippers money."

13831 Northwest Freeway, Suite 235  
Houston, TX 77040  
United States  
tel: 713 782 7500  
fax: 713 895 8383

No.2 Guanghua Road  
Room 1606, Building B  
Sunshine 100  
CBD Chaoyang District  
Beijing, China  
100026  
tel: +86 10 51000 382  
fax: +86 10 51000 385

Sapthagiri Towers  
#408, 4th Floor  
1-10-75/1/1 to 6  
Begumpet Road  
Hyderabad 500016  
India  
tel: +91 402776 1202  
fax: +91 402776 1288

Hastings House, Falcon Court  
Preston Farm Business Park  
Stockton-on-Tees  
TS18 3TS  
United Kingdom  
tel: +44 1642 677 755  
fax: +44 1642 606 655