



ROCKIES EXPRESS

The King of Right of Way Pipeline Projects

BY BARBARA BILLITZER

For those who were closely involved with it, this was the project of a lifetime. The Rockies Express Pipeline project, aptly christened REX, is the largest and possibly most significant natural gas pipeline project to be completed in the United States in the past twenty years - perhaps ever.

Designed to keep pace with the nation's need for energy, the Rockies Express Pipeline System represents a significant investment in U.S. energy infrastructure. Spanning 1,679 miles across eight states, this massive undertaking took four years to complete and cost nearly \$6.8 billion.

REX is, indeed, the king of pipeline projects, and it presented some king-size right of way challenges.

WHERE IT ALL BEGAN

The push to build REX came from Rockies gas producers in late 2005. There was growing demand for safe, clean-burning natural gas in the United States, and additional pipeline capacity would be needed to deliver it to end users. At the time, pipeline capacity was so limited that producers couldn't even get fuel to market. Gas was selling at a reduced rate of up to 30% compared to prices in the east.

The vast but remote stores of fossil fuel buried under the Rocky Mountains needed to be linked with the power-hungry markets of the Midwest and Northeast. The key question was, who was equipped to build the infrastructure necessary?

The project would be developed by Rockies Express Pipeline LLC, as a joint development of Kinder Morgan Energy Partners, L.P.; Semptra Pipelines & Storage, a unit of Semptra Energy; and ConocoPhillips. “Everybody really needed the pipe,” said Steven Kean, Kinder’s President of Natural Gas Pipelines and Chief Operating Officer.

It was constructed in three phases—REX-Entrega, 327 miles across Colorado and Wyoming, REX-West, 713 miles from Wyoming to eastern Missouri, and the recently completed REX-East portion, which stretches from eastern Missouri to eastern Ohio.

SIZE MATTERS

By necessity, the project route was designed to cross a large portion of agricultural land in the states of Nebraska, Illinois and Indiana, and to a lesser extent in Missouri, Kansas and Ohio. As is typical with Federal Energy Regulatory Commission (FERC) projects, REX planners attempted to follow pre-existing utility easements wherever practical, but there were still large expanses of “green fields” along the route.

The number of affected property owners was staggering. Nearly 25,000 stakeholders were involved in the half-mile corridor encompassing the pipeline route – all of whom had to be advised of their rights under FERC regulations.

REX West and East covered portions of eight states and involved 1,352 miles of right of way for a 42” welded steel natural gas pipeline system. There were 4,843 tracts with more than 6,500 individual owners. There were 74 railroad crossings and hundreds of drainage districts, townships, municipal jurisdictions, zoning boards and other entities which required permits or related agreements.

The right of way team needed to acquire 22 meter/interconnect sites, as well as 15 compressor station sites. Easements were required for over 400 temporary and permanent access roads. They were also required to obtain all non-environmental permitting and permission for the crossings of more than 1,400 federal, state, county and local roads. Permitting agreements were also required for districts and water body crossings owned by the U.S. Army Corps of Engineers.

RIGHT OF WAY CHALLENGES

The project team was comprised of representatives of REX and its partner companies, engineering, environmental and cultural, legal support and public and government relations contractors.

In 2005, Contract Land Staff (CLS) got involved with the right of way feasibility study. They were asked to review and fine-tune the route in early August. In the same timeframe, they were tasked with collecting tax ownership records in anticipation of the FERC-mandated open house meetings. According to CLS Senior Vice President Kerry Malone, who led the project team, “These meetings were needed so that the public had an opportunity to learn about the project, ask questions and raise potential issues. As part of this process, it was imperative that we advise each owner about the meeting, an essential task that required a mailing list of all property owners across all eight states.”



REX West engaged pipe stringing and bending in Wyoming.



Trains were used to transport pipe throughout REX construction.

However, when they began researching the ownership records available online, they were amazed to find that there was virtually no data available for the areas involved. As a result, they knew that field investigations would be required to obtain these records, and they needed to work quickly. The CLS corporate office staff created packages containing all of the pertinent information needed for tracking down the property owners. The package included plat book pages in each county indicating the route or corridor that needed to be researched, addresses for courthouse records and tax offices, hotel and motel listings for each area and FedEx drop locations for the daily transmission of hard copy data back to the corporate office. Also included was a standardized process for electronic communications between the agents and the corporate office.

This organized process enabled a minimal number of agents to hit the ground running. It also resulted in the cost-effective and rapid collection of all data needed to construct the mailing lists. For the REX West portion, data for the 713 miles was collected and organized in less than three weeks. The REX East portion utilized the same accelerated process.

ENVIRONMENTAL IMPACT

The project experienced other challenges, many of which were caused by Mother Nature. Long and severe winter conditions prevailed during the primary construction seasons for both REX West and REX East. Incessant rains in many areas presented scheduling issues for the construction operation. The project was plagued with what national media sources deemed to be the “500 year” rains, along with the flooding, clean-up and restoration issues that followed.

The route also passed through what proved to be several rich archeological and cultural zones, requiring lengthy investigation and mitigation. There were 62 cultural sites eligible for listing in the National Registry for Historic Places identified along the route. Of those, 47 were successfully mitigated, and the remaining 15 were successfully avoided altogether.

Working with the U.S. Fish and Wildlife Service, the project team successfully negotiated an agreement to avoid the “take” of migratory birds and/or their

habitat. They were also able to obtain a “not likely to adversely effect” decision by implementing appropriate and revolutionary methods to protect the Indiana bat and its habitat. In some areas, prime hunting caused concerns for survey and construction.

There were 1,485 surface water body crossings identified. Major environmental permits, licenses, authorizations and clearances were required. Over the six states affected, the team obtained 41 state permits and 13 federal permits. The unfamiliarity of some state and federal agencies with processing environmental permits for a project of this magnitude created unanticipated delays, and the nuances of the FERC process made for some interesting moments.

RAMPING UP

It was the Wednesday prior to the Thanksgiving holiday when CLS received the REX West staffing approval. The day had finally arrived where they could move forward with the next step, and they were faced with conflicting travel schedules. To complicate matters, the critical and time-sensitive Open House Notice letters also arrived that Wednesday, and they needed to be mailed immediately.

For many companies, the four-day holiday weekend was sacred. So it came as no surprise to CLS to discover that their mail processing service was closed until the following Monday. Not willing to waste any time, CLS management and support staff realized that they needed to handle it internally. Even with the limited staff available, they were able to process 6,800 Open House Notices in just two days. It wasn't easy, but through perseverance and teamwork, the team overcame the first hurdle and met the FERC timeline, which required they hold the meetings in December and January.

The hiring and placement of agents, supervisors and administrative staff was accelerated, and wherever possible, they were assigned to report immediately following the holiday to begin survey permitting activities. The CLS team knew that every phase of the project was time-sensitive, and they had only a few months to finish the permitting process. Fortunately, the permits were obtained on schedule, and the acquisition of options for easements began in March 2006 as planned. The next step was to complete title investigation, document preparation and agent training with another aggressive timeline. With only twelve months until the construction commenced, the project team needed to stay focused on goals and timelines, while managing all of the right of way processes.

STAFF DEMONSTRATES TRUE SUCCESS

To ensure success, CLS management recognized that all personnel assigned to the project would need to be highly motivated, trained and prepared. Extensive training was required, followed by the development of a comprehensive project procedures manual to ensure consistency. With thousands of documents to monitor and file, CLS relied on their proprietary state-of-the-art data management system to automate production of new documents and maintain data throughout the project.

Finding experienced staff was also challenging and required quick and comprehensive training in order to match the personnel levels required for a project the size of REX. While this was a high activity period for the right of way industry, it followed a declining phase stage where many older and more experienced agents either retired or left the profession to work in the more lucrative oil and gas arena. Adding to the challenge was the requirement that staff be licensed real estate brokers in order to acquire easements in certain states.

CLS actively recruited well-educated, computer literate, and underemployed people from other industries (notably from real estate, banking, title company and mortgage company fields – which were going through a rough patch at the time). They embarked on an extensive education program for both new and seasoned personnel, and developed and encouraged a mentoring program where experienced employees were paired with the new recruits for a training period. For Missouri, where an in-state license is required, the company was able to garner the services of personnel with Missouri real estate broker licenses, or those who could transfer licenses from



Pipe is laid out along the right of way during REX West construction in Nebraska.

states with reciprocity, to handle the load there and to provide training to bring those folks up to speed.

At the highest staffing level for the project, CLS had over 140 personnel devoted to REX. The company was able to attract personnel with good basic skills, energy and the willingness to follow standardized processes and procedures. Several have proven themselves and moved rapidly into managerial positions, while others established themselves as long-term employees.

The results speak for themselves. Acquisition of all rights of way was accomplished within the project timeline allowed for construction to take place with no land-related delays. The project was accomplished within budget and with nearly 100% voluntary acquisition. For REX West, voluntary acquisition was 99.7% successful. While REX East proved to be a more difficult area to acquire and the acquisition costs were somewhat higher, CLS still accomplished voluntary acquisition at the rate of 99.2%. The use of condemnation was extraordinarily low for a project of this size traversing such a large and difficult area.



For the mainline construction, pipes were welded using on-site welding shacks.

In addition to the staggering amounts of people hours, materials, processes and teamwork, bear in mind that CLS created nearly 40,000 documents and processed more than 90,000 documents. The right of way agents also produced roughly 110,000 contact notes and ran 30-year limited title certificates for 6,400 properties.

BOOST TO THE ECONOMY

Considered the king of pipelines within the energy sector, for the country's struggling work force, REX was deemed the king of jobs as well. The project amounted to a mini-stimulus plan for towns along the pipeline's path, stretching from Rio Blanco County, Colorado to recession-struck regions of Ohio. As the recession took hold, the project became popular in the region for injecting money into struggling local economies. REX consumed over 27 million hours of labor, and created 20,000 jobs ranging from welders, pipe benders and road borers to the "straw boss," who oversaw the seeding of grass once pipes were buried.

During construction, the project helped buoy depressed economies in states such as Illinois, Indiana and Ohio. "We came in those states with all of these construction jobs and all of these workers descending on these communities," said Allen Fore, Director of Community Relations for Rockies Express. Some businesses in those communities said the construction work kept them from closing. Rockies gas producers can take a lot of the credit for a project that employed about 20,000 construction workers during its peak. "The folks that helped produce this certainly had a role to play in helping people all across the country in a

tough economic climate," Fore said. "The pipeline's overseers hope to ensure their lasting legacy on the areas through which it runs is just as positive. That means doing right by the 21,000 landowners they worked with to use land for the pipeline. Once we're done with the pipeline, our commitment and our obligation is to restore the land, as closely as possible, to pre-construction condition."

According to Fore, "REX has benefited and will continue to benefit communities along the pipeline route in a number of

ways. At each of the headquarters along the route, REX pumped in millions of dollars into the local businesses for supplies and equipment and materials. In addition, REX is expected to increase the supply and reliability of natural gas, and could bring lower natural gas prices and heating bills."

Across the route, the pipeline's benefit will likely be the long-term supply of natural gas. With a capacity of about 1.8 billion cubic feet per day, it will deliver enough natural gas to service 4.1 million homes. Since the pipeline is federally regulated and the natural gas is fully committed for the next 10 years at a set price, this means the pipeline will not be impacted by the ups and downs of natural gas prices. Additionally, the 42-inch high pressure steel pipeline has a life expectancy of 70 to 80 years. This means that by adding the Rockies Express Pipeline, natural gas can be transported for at least 100 years.

REX also brought hundreds of jobs to individual counties along the route where construction offices were located. In addition to creating jobs, many states and counties along the pipeline route will receive significant revenue in property taxes attributable to the physical assets of the project.

GIVING BACK

As the construction process wrapped up, REX officials wanted to give back to those communities whose support was a contributing factor in the project's success. With all the excess materials they had accumulated, they decided to donate as much as possible to those communities.



Crossing eight states, the REX pipeline project benefited numerous local economies during its four years of eastward construction.

The remaining steel pipe, valued at \$4,000, was donated to the local college for use by student welders. Over the years, REX has hosted dozens of local shop and welding classes across the pipeline route. The classes have been an important opportunity for students to learn about the pipeline construction process and to hear directly from professional workers about careers in the growing pipeline industry.

Following construction of the \$40 million Chandlersville Compressor Station in Muskingum, surplus lumber occupied the 20-acre site. To help provide practical, hands-on experience for students preparing to enter the job market, a donation of \$5,000 worth of lumber and construction materials was made to the local school district.



Ohio's Muskingum County Commissioners Brian Hill, Jerry Lavy and John Bates present a proclamation to Allen Fore officially declaring August 4, 2009 as Rockies Express Pipeline Economic Stimulus Day.

SUPPLY AND RELIABILITY

The pipeline became fully operational on November 12, 2009. Today, the pipeline greatly enhances delivery of domestic energy, as natural gas supplies 25 percent of the nation's domestic power. While other interconnecting gas pipelines link the regions, Rockies Express is the only single-pipeline, direct transportation system between the Rockies and the East. The pipeline carries enough gas to heat 4 million homes from the Rocky Mountains' abundant supply to valuable East Coast markets.

REX will help meet the energy needs of consumers and businesses for years to come. The project has benefited and will continue to benefit communities along the pipeline route. At each of the headquarters along the route, REX pumped in millions of dollars into the local businesses for supplies, equipment and materials. In addition, REX is expected to increase the supply and reliability of natural gas, potentially bringing lower natural gas prices and heating bills.

"REX was probably the project of a lifetime for those of us who were closely involved with it," noted Kerry Malone, who devoted more than four years to bringing this project to fruition. "It will be remembered for many years to come and it will serve the country far beyond the lifetime of those who worked on the project. All of us at CLS are proud to have provided some small measure of service to this immense team effort. We believe our contribution was integral to REX providing an essential service to the country and to ensuring a long-term revenue stream to the client companies."