



# FROM THE BURNER TIP

A Close-up look at **The Natural Gas Business**

## Mastio's Latest Pipeline Survey Offers A Regional Flavor

By **Carol Freedenthal**, Contributing Editor

**N**atural gas pipelines are the common carriers bringing gas from the field to local markets. In the great evolution of government decontrol of the energy business, these pipelines took the biggest "hit" in the way of doing business. Previously, they were both merchants and transporters. Now they are only transporters and anyone — producers, marketers, or consumers — can buy and sell natural gas and ship it. Sales are nearly \$1 trillion, thanks to recent high prices. Transportation pipelines are the vital link to bring gas from the wellhead, or in the case of liquefied natural gas (LNG) imports, from the dock to local retail markets. Market research to rate these pipelines based on customer satisfaction is an important tool to help them build and give needed service. Transportation buyers can use the data to

help choose their carrier.

Transportation pipelines make both short- and long-distance hauls. Major pipelines go from the Gulf of Mexico or other Southwest locations to the upper Northeast or to the opposite side of the nation, feeding the West Coast's large population centers. Mid-continent gas flows both east and west and gas from Canada goes to major northern U.S. markets. By trading Canadian gas and using what is known in the business as "back-hauling," Canadian gas can be sold into southern and lower markets to compete price wise with domestically produced gas.

According to the Federal Energy Regulatory Commission (FERC), there are close to 100 interstate gas pipelines. Pipelines that transport gas only within the state of production — intrastate pipelines — total about 89. Canada has 21 pipelines. Major U.S. and

Canadian pipelines are owned by holding companies with 20 companies owning the top 35 pipelines. El Paso is the biggest holding company with 6.5 pipelines (it owns 50% of Florida Gas) and TransCanada owns four. Williams owns three and seven other companies own two pipelines each.

Customer satisfaction studies are used by many industries to measure both sales and buying attributes. While more common to industries with high consumer buying populations like automobiles, even commodity businesses where there is strong competition for the buyer's dollar make use of customer satisfaction research. Natural gas transportation with its strong competition for selling pipeline space and the many services that the pipeline can offer is an ideal market for customer satisfaction studies. While there are a couple of companies offering this type of



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market research, the major one in the energy and chemical industries is Mastio & Company in St. Joseph, MO.

Mastio began its studies in 1994 shortly after deregulation had taken hold and pipeline competition began to grow strongly. Mastio does its market research by calling over a thousand pipeline customers — industrial gas users, local distribution companies, gas producers, electric generating companies, and energy marketing companies — and polls them on the pipelines they have used most frequently during the past year. The latest study includes 43 interstate, seven intrastate, and nine Canadian pipelines. Total pipeline capacity of the 59 companies represents about 85% of all gas shipped in North America.

The researchers use 30 attributes on which customers are asked to rate the pipeline, using a scale of one to 10 for each. When totaled, the scores give the pipeline's ranking. To make comparison of the pipelines more meaningful, Mastio divides the North American pipeline population into five groups:

**Mega Interstate** — at least 1,000 miles of pipe and deliveries of at least 1 Tcf yearly;

**Major Interstate** — at least 1,000 miles of pipe and serves three or more states;

**Regional Interstate** — less than 1,000 miles of pipe and serves less than three states;

**Intrastate** — Serves only the state where the gas production is located; and

**Canadian** — Originates in Canada.

Mastio recently published its 2004, Eighth Edition of the industry wide, *Natural Gas Pipeline Customer Satisfaction Study*. The top-rated, ten U.S. pipelines out of a group of 43 interstate pipelines were:

1. Great Lakes Gas Transmission
2. Iroquois Gas Transmission
3. Williams Gas Pipeline, Northwest
4. Ozark Gas Transmission
5. Southern Star Central
6. Gas Transmission Northwest
7. Transwestern Pipeline Co.
8. Southern Natural Gas
9. Williams Gas — Texas Gas
10. Kern River Transmission

The group contains the mega, major and regional pipelines. Within the top five, three are regional pipelines, one is mega in size and one is major. The bottom five are comprised of three regional and two mega pipelines. The size distribution is fairly even as both big and small pipelines are highly regarded by their customers. The top five in the 2003 Seventh Edition were similar to this year, as three regional, one major and one mega were the highest rated. Last year's leader was Sabine Pipe Line Co., and this year's top contender, Great Lakes Gas Transmission, was No. 2 last year. The prior year, all three top pipelines were regional in size.

The attributes used for rating the pipelines cover almost all aspects of the pipelines' business. Some examples include:

- Ease of doing business;
- Representatives who listen well;
- Personnel respond quickly to requests;
- Competitive pricing of service; and
- Ease of use of the pipelines' EBB.

In doing the general evaluation, the attributes all have equal value. The score from the users' evaluation is totaled and those with the highest score are rated the best within the category of pipelines. Some pipelines end up being in more than one category because of their service

area and size.

In addition to the attributes, several open-ended questions were asked in this year's study. One asked respondents what percent they would assign to price compared to non-price factors in selecting transporters. For the entire sampling, 70% indicated price was the major consideration while 30% made their selection on non-price benefits. This varied by the group being sampled. The LDC sampling showed 66% favored price vs. non-price benefits.

For the first time, Mastio added a new set of indexes called Customer Value Index where the attributes used in polling the pipeline customers were weighted instead of all being equal. Making this change, the Indexes give a measure of relative values for measuring attributes. Making 100 the average score makes it possible to measure some of the competitiveness between different major pipelines in a given region. Using the Customer Value Scores, Mastio showed how competitive Northeast, Midwest and West/Northwest pipeline services are. Customer Value scores showed very competitive ratings in the Northeast where only one or two percentage points separated the top five pipelines.

Using the same methodology, the Midwest range for the top performers was roughly plus or minus 15%, indicating considerably less competition between the major pipelines serving this area. In the West/Northwest, the range again was tight, varying roughly plus or minus 6% between top scorers.

Deregulation made all pipelines common carriers. Any buyer or seller can reserve and book space for natural gas shipments. The industry is now a very competitive business place. Many major pipelines serve similar areas of the U.S. and other than during peak demand periods when most space is needed, competition for transportation business is severe. The Northeast corridor is a good example with many competing pipelines bringing gas out of the Southwest. Tennessee Gas Pipeline, Texas Eastern, Transco, and Columbia are some of the major pipelines competing head-to-head to carry gas to northern markets from the Southwest.

At the same time, northern markets are also served by gas coming from Canada. This is also true in the Mid-continent markets where many pipelines from the Southwest and Canada serve the markets, each coming from opposite directions. The West Coast has had additional pipelines built in recent years so that there too, pipeline competition can be severe. The five biggest U.S. interstate pipelines, based on reported capacity to the FERC, are Columbia Gas (8.0 Bcf), Transco (7.7 Bcf), Tennessee Gas (6.6 Bcf), ANR (6.6 Bcf), and Texas Eastern (6.1 Bcf). TransCanada's Nova pipeline has a capacity of 12.3 Bcf.

During 2001-2002, many pipelines changed ownership as the companies holding them needed to raise cash. Companies like Williams, Duke, Dynegy, CMS, and others bought and sold pipelines to recover losses from their trading operations. The changes saw some new players enter the transportation pipeline business such as Loews, AIG, Mid-American Pipeline, and Southern Union.

Using both the straight Index with the unweighted attributes and the weighted Customer Value Index offers a better measure of pipeline services as evaluated by their customers. This information helps the pipeline to add better customer service and increase its transportation sales. Although price itself is so strong a factor in the customer's selection of carriers, any additional customer service can help in selling transportation services and space. **PE&GJ**

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