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Texas Telecom Legislation

STATUS: Under court challenge

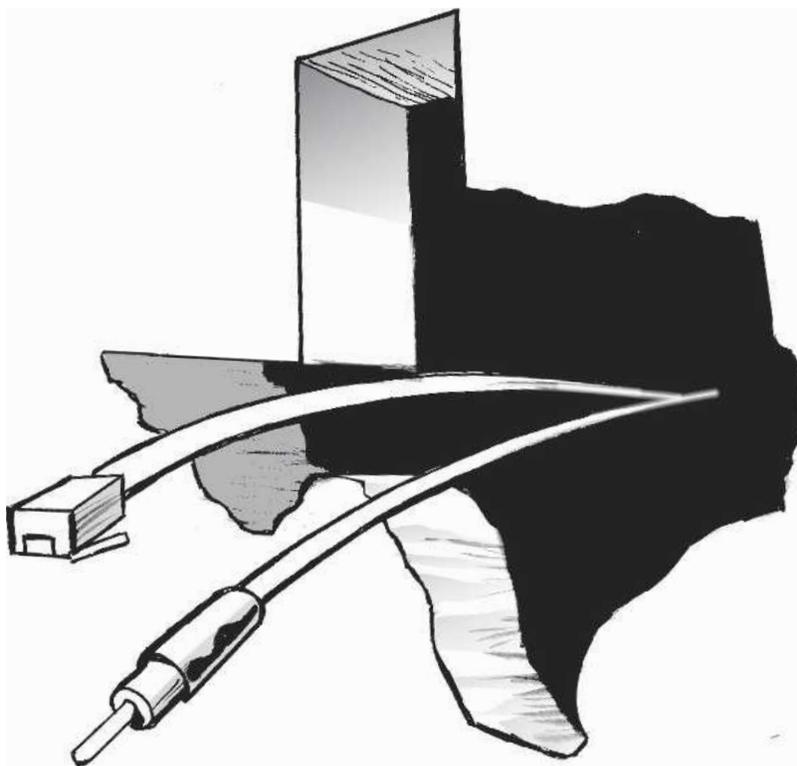
A summer 2005 special session of the Texas Legislature enacted a much-discussed telecommunications bill that Gov. Rick Perry signed into law in September. The law is now under challenge in court.

The Texas legislation is of national significance because its content mirrors the long-running federal debate over telecom policy. Federal and state telecom regulations have both created two significant problems: First, regulation creates cross-subsidies that tax some services, such as long-distance calling and wireless, in order to permit below-cost pricing for other services, such as local wireline phone service. Second, different companies that historically used different technologies, such as phone companies and cable companies, are regulated differently, even though they are all now scrambling to offer the "triple play" of voice, data, and video.

The Texas law addresses both cross-subsidies and convergence. It requires many telephone companies—including SBC, the largest incumbent—to reduce inflated long-distance "access charges" that provide a pool of revenues to subsidize local service. The price of "basic" residential service is

still frozen, but additional features like voice mail are deregulated, so subsidies are likely to disappear for customers who want more than a local touch-tone phone line.

Even basic residential service could be deregulated once the Texas Public



Utility Commission (PUC) decides how to reform universal service programs, which subsidize phone service for low-income households and pay out money to small and rural phone companies. The law appears to push the PUC toward shrinking the size of the universal service programs through more careful targeting of subsidies that go to small and rural phone companies. The PUC must produce a report on universal service, including an evaluation of whether it has achieved its goals and recommendations for

reform, by January 5, 2007.

Texas has also staked out a position in the battle royal between cable and phone companies that will likely occur before the U.S. Congress next year. Historically, local cable franchising protected monopolies and increased costs by forcing cable companies to pay fees and provide various public services in exchange for their monopolies. Phone companies would like to bypass those obligations, along with the necessity of contracting with thousands of local authorities before they can compete. Cable companies see little reason the newcomers should not bear the same regulatory burdens they have shouldered.

Texas addressed this issue by requiring the PUC to grant statewide franchises, which include a five percent franchise fee to local governments. Franchises must be approved within 16 days of application. Cable companies can opt into statewide franchising when their current franchises expire. Nevertheless, the Texas Cable and Telecommunications

Association immediately filed suit against the law, arguing that it discriminates against them. The Texas law also seeks to encourage broadband competition by empowering electric utilities to offer broadband over powerlines and removing municipal jurisdiction over this service.

Many effects of the Texas law are still unclear because the legislature left a lot of the details to the PUC—especially on universal service reform. The PUC gets the first shot at figuring out what kinds of companies will get

what size subsidies and how the revenues will be raised.

Federal parallels abound. The Federal Communications Commission has an ongoing proceeding on “intercarrier compensation” that has the potential to eliminate hidden cross-subsidies. Members of Congress have already introduced legislation that would let phone companies bypass local cable franchising. Universal service is a topic of significant concern because the current funding mechanism is widely regarded as unsustainable in the face of technological change. Whether Congress will follow Texas’ lead, wait to see how this experiment plays out, or strike out in a different direction altogether remains to be seen.

—Jerry Ellig

Natural Gas Quality Standards

STATUS: Petitions await FERC action

Just when consumers thought they had heard all the bad news about winter natural gas prices, along comes an impasse that could elevate gas prices just a bit more.

Natural gas producers have petitioned the Federal Energy Regulatory Commission (FERC) for a rulemaking on gas quality and interchangeability. Producers want FERC to mandate a procedure for setting a hydrocarbon dew point (temperature at which liq-

uids condense from the gas) for interstate transmission pipelines that do not specify one in their tariffs. A pipeline customer could seek to change the standard via a complaint, but in assessing the complaint FERC would take into account steps that the customer could take to address the problem. Producers advocate a similar approach to establish standards governing interchangeability of gas delivered by a pipeline to a given location.

Various parties may be reluctant to make additional investments (in natural gas development, liquefied natural gas import facilities, pipeline modifications, other facilities needed to alter gas quality, or gas-using equipment) until they know the standards and understand the process for determining who will shoulder what costs of dealing with gas that fails to meet the standard.

What we have here is a classic incomplete contract. If some gas has a relatively high dew point or fails to meet interchange standards, who should pay to remedy the situation? The producer or importer, who could process the gas? The pipeline, which might add some insulation to keep the gas warmer at a particular location? The industrial customer, which might modify its equipment to treat or use gas of a different quality?

In a world with clear property rights, one might expect that negotiations could resolve that question. It would be in everyone’s interest that the party who could solve the prob-

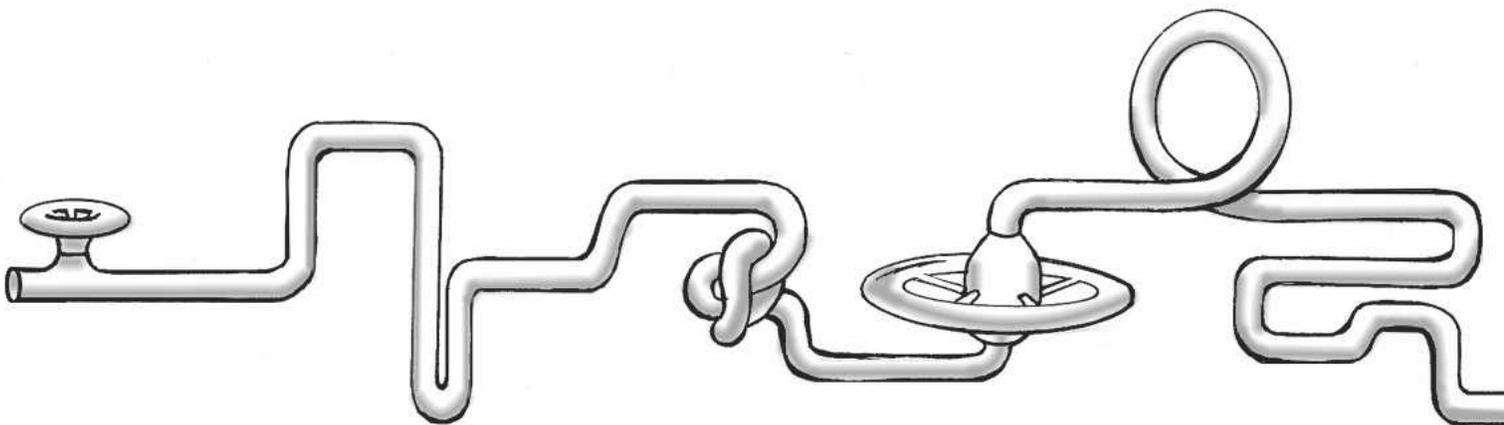
lem at lowest cost would do so. The initial assignment of property rights would determine whether the other parties need to pay the lowest-cost avoider anything to solve the problem.

Interstate pipeline regulation, however, requires pipelines to post tariffs that specify the rates, terms, and conditions under which they will ship gas. A pipeline could evade price regulation by setting quality standards that shift costs to someone else. Terms not already specified in tariffs are essentially property rights “up for grabs.” Producers, pipelines, and customers all have incentives to persuade FERC to shift expenses to someone else.

Producers are essentially calling on FERC to be a Coasean judge, establishing a default rule and allowing exceptions based on economic efficiency.

All parties may have incentives to delay investments until the issue is settled. That would mean investments necessary to produce, import, process, or transport gas would get delayed at a time when supplies are tight. If the investments could have a significant effect on gas supply, higher prices could result.

Why is this an issue now? Much of the time, natural gas liquids are more valuable as industrial feedstocks than as part of the natural gas stream sold to consumers, industrial customers, and electric utilities. As a result, there is usually an economic incentive to extract the liquids before the gas enters the pipeline. But recent increases in



the price of gas have in some instances made the liquids more valuable as part of the gas stream. Similarly, higher prices have made LNG imports economical. LNG often has a higher concentration of heavy molecules than domestic gas, which makes both the condensation and interchangeability issues important.

FERC has sponsored industry technical conferences to address these issues, but has not initiated a rulemaking.

—Jerry Ellig

Orphan Works

STATUS: Report expected by early 2006

The Copyright Office has recently completed an inquiry into the orphan works problem and is expected to issue a report with its findings soon. Orphan works are copyrighted works whose owners are difficult or even impossible to locate. Because their copyright owners are unknown, orphan works will often go unused, even if they are culturally or commercially valuable, for fear of litigation.

Copyright protection attaches to all works of expression at the moment of their creation and extends for the life of the author plus 70 years. Because of the difficulty of identifying and locating works that are quite old but that may still be under copyright, many potential users give up and avoid use, and our culture is so much the poorer. After all, the current copyright

owner of a work might be happy to license it for a fee or gratuitously. The work might even be in the public domain so that it is freely usable, except that we cannot ascertain this with certainty.

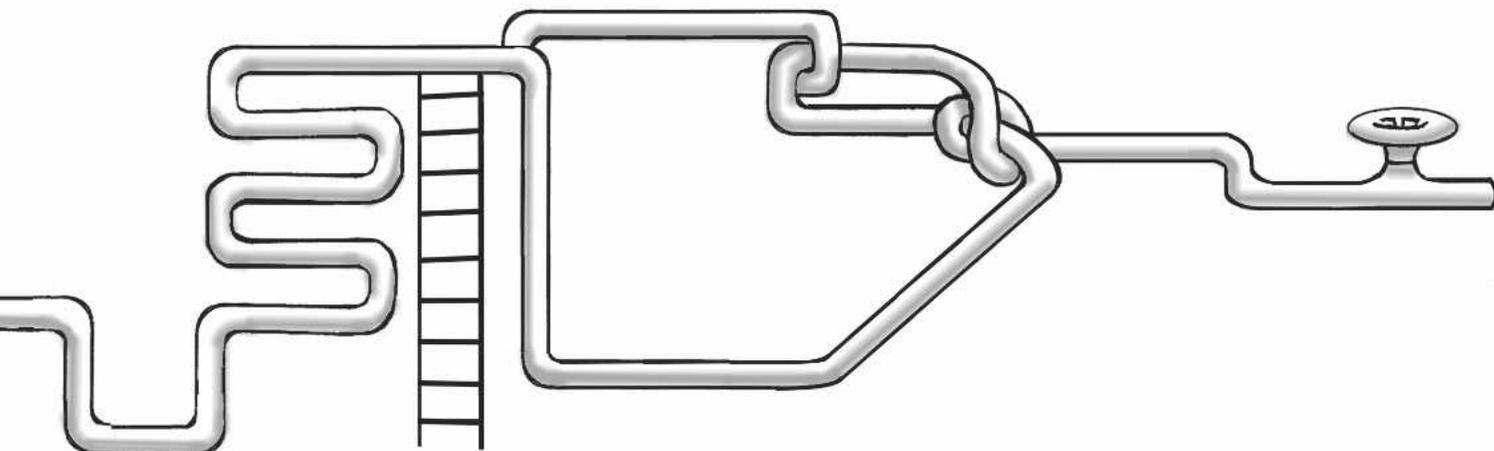
In large part, the orphan works problem is caused by the elimination of formalities in copyright law. For over 180 years, copyright law required authors to register their works with the Copyright Office and comply with other formalities before they were protected. The Copyright Act of 1976 did away with those formalities and, with them, effective ways to identify and locate authors. The shift to unconditional copyright was enacted largely in order to comply with the 1886 Berne Convention, an international agreement on copyrights that includes a prohibition on formalities as a precondition to the enjoyment and exercise of copyright.

Many of the proposed solutions to the orphan works problem rely on the reintroduction of formalities into the law, including registration and periodic renewal of copyright. However, those solutions are impracticable. Reenacting formalities would necessarily require Congress to abrogate the Berne Convention treaty, something it is not likely to do. To avoid this dilemma, some suggest skirting the Berne requirements by making formalities nominally voluntary. Noncompliance with the “voluntary” formalities would not strip copyright from an author. This would

seem to satisfy Berne’s requirement that full enjoyment of rights not be conditioned on formalities. However, if an author did not comply, she would no longer have the right to deny use of her work or set the terms of licensing. Instead, she would only be entitled to a compulsory license fee. Such a system would likely not pass Berne Convention muster because the treaty states that full enjoyment of rights cannot be conditioned on formalities.

Whatever the wisdom of U.S. acceptance of the Berne Convention and the elimination of formalities, any solution to the orphan works problem must accept these as a given. One Berne-compatible solution would be to create a new affirmative defense to infringement actions similar to the fair use defense. After a reasonable search in good faith, if no copyright holder for a work is found, the work may be used without the user being subject to liability. A user who is subsequently sued for infringement will be able to defend by claiming a codified orphan works defense. The user will have to convince a court that after a reasonable search in good faith she was not able to locate the copyright owner, thus making the work orphaned. If the court finds that the search was in fact reasonable and carried out in good faith, and that no owner was found, then the work will be deemed orphaned at the time it was used and the user will not be liable for infringement.

—Jerry Brito



The Very Boring Reasons behind High Gas Prices

BY ALASTAIR J. WALLING

Washington, D.C., and the state capitals are abuzz with talk of a Big Oil conspiracy intended to keep gasoline prices artificially high. Governors and lawmakers are demanding investigations, and everyone seems certain that incriminating documents will magically appear from a pumpkin patch somewhere. While this is all very exciting, the sad truth behind the high gasoline prices is really quite boring—in fact, very, very boring.

Despite some truly spectacular cyclical busts in the 1980s and 1990s, oil companies have enjoyed favorable margins in most of their operations. The exception to this rule is refining. Though we do not know refiners' incremental margins data (which are some of the most tightly guarded trade secrets in any industry), we can gain insight into the refining business from the average margins data collected by the U.S. Energy Information Agency (EIA). Between 1977 and 2002, refiners' net margins varied from a low of one cent per barrel in 1984 to a high of \$2.78 in 2001. However, the 2001 high is a little misleading, as it was only the third time in the 26-year period that net margins cracked \$2. Although the margins remained below \$1 about 40 percent of the time, a few good years push the average margin to about \$1.29 per barrel of oil over the timeframe.

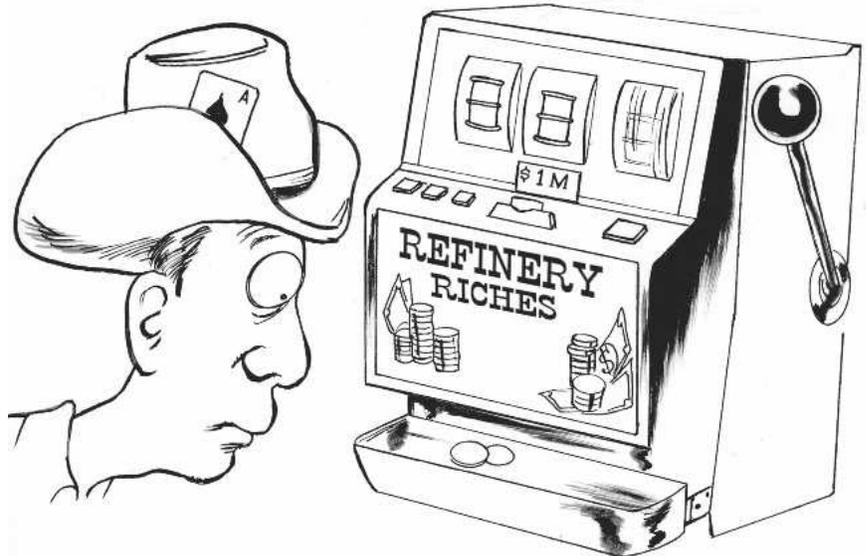
To appreciate the significance of those numbers, imagine that we construct a refinery. Our fantasy refinery should cost about \$1.5 billion (\$2 billion is probably more realistic, but we will be generous), it will process 100,000 barrels of crude oil per day, and it will never shut down for maintenance, hurricanes, industrial action, or the occasional explosion. It will also not pay any taxes. At \$1.29 per barrel net margin, our successful little operation will make approximately \$129,000 a day or about \$47 million a year (sans taxes).

That seems pretty good until we consider how much money we plowed into the venture. Assuming that everything goes right, our refinery will earn about three percent of its investment a year and take 32 years to pay itself off. At the end of the 32 years, we would realize that it would have been better to buy

a warehouse full of no-risk, low-yield treasury bonds.

True, refiners are doing quite well for themselves these days, but good years are no guarantee of future margins. The refinery business requires massive amounts of capital and can be a real rollercoaster. While average margins reached a record high of \$2.78 a barrel in 2001, they plummeted to a mere 19 cents in 2002—the second worst year since public records began in 1977. In 1988, the refining business reached peak profitability with returns on sales of 15 percent. However, those profits did not last, falling to two percent in the early 1990s. By 1995, the rate of return hovered perilously close to zero. Thanks largely to cost-cutting measures, refiners managed to improve their margins and profits recovered to 14 percent by 2001. With the exception of a brief period in 1998, refining has persistently performed well below all other businesses between 1989 and the beginning of 2001.

ENVIRONMENTAL COSTS Capital investment in refining tends to go in spurts. In the late 1970s and early 1980s, refiners upgraded in order to accommodate heavier and higher-sulfur crude—in effect, expanding the amount of oil available to supply the nation's energy needs. A second spurt in investment occurred in the 1990s and was largely due to the mandates of the 1990 Amendments to the Clean



Air Act. The new law required the production of oxygenated gasoline by 1992, low-sulfur diesel fuels by 1993, and reformulated gasoline by 1995.

As a result of the new laws and regulations, pollution abatement controls as a percentage of refiners' capital expenditure skyrocketed from a low of about 10 percent in 1985 to nearly 50 percent in 1993–1994, according to the EIA. In 1988, refineries spent a little more than \$560 million on environmentally related investment, but by 1992 this figure had risen to \$2.69 billion, an increase of about 400 percent. However, capital investment tells only half of the story. Operating costs related to environmental compliance shot up to \$3 billion in 1991 and remained high throughout the decade.

In testimony before the Federal Trade Commission, Amer-

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ican Petroleum Institute official Edward Murphy stated that refiners spent a total of \$46.9 billion in the 1990s complying with environmental laws and regulations. Some \$17.9 billion of that came in the form of capital expenditures, while \$29 billion represented operations and maintenance costs specifically intended to meet environmental requirements. According to the EIA, the impact of environmental requirements on the returns on investment (ROI) in refining has been “substantial.” Between 1996 and 2001, environmental compliance reduced ROI by an average of 42 percent a year. Between 1991 and 1995, the reduction was 69 percent. In 1992 (a particularly bad year for refiners), environmental investments reduced refiners’ ROI by 95.1 percent.

Of course, we cannot assume that, had the refiners not spent so much in the 1990s for environmental measures, they would have plowed all of that money into expanding capacity. (Interestingly, \$46.9 billion buys between 2.3 million and 4.7 million barrels per day in refining capacity.) But it is reasonable to think that future expansion will require significant spending on pollution controls, and that cost will act as a drag. This idea is especially worrisome if refiners are reaching the limit of the capacity gains they can make from improved efficiency, and they must expand the size of their facilities (and trigger New Source Review) in order to make significant additional gains.

In addition to retarding capacity growth, environmental regulation requiring the use of boutique fuels has balkanized

the national gasoline market. In the 1980s, gasoline was largely fungible and could easily flow throughout the country and alleviate regional shortages, which helped to stabilize prices and shore up supplies. Today, EPA air quality rules require different formulations of gasoline in different parts of the country. If supplies of super-clean reformulated gasoline run low in Los Angeles, they cannot be supplanted by stocks of a slightly dirtier blend on sale in neighboring Nevada. The result is periodic, regional spikes in gas prices, which the market has difficulty alleviating because it is forbidden from drawing supplies from regions with different air quality standards. Of course, oil companies do not mind having to supply the boutique fuels, but they add to consumers’ gas bill woes.

CONCLUSION At the end of the day, high world crude oil prices combined with tight capacity and a fractured gasoline market form the real “conspiracy” behind today’s high gas prices. The specter of a grand gasoline conspiracy is somewhat exciting, but implausible when confronted with the dull facts and numbers. Low profit margins have discouraged investment in domestic refining and much of what has been invested has gone into environmental controls. A promising policy response is to allow refiners greater flexibility in complying with environmental regulation. Then, perhaps, we might get the clean air we so desperately want without the \$3 a gallon price tag. **R**